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ABSTRACT

Various factors, including an increase in the standard of living of the population throughout the Western industralized countries, the need for better-qualified workers, and the necessity of providing alternatives to unemployment for young people, have led to increased demands for training courses provided immediately after compulsory schooling. Governments and the private sector alike have responded to this demand by developing new education, training, and work experience programs aimed at youth between the ages of 16 and 19 and by introducing changes in the organization and objectives of upper-secondary education, including general, technical, and vocational courses. Although the increasing number of new programs for youth is a promising sign, the lack of coordination among the different types of services available have created a number of new problems for planners and policymakers, employers, and the youth themselves. Problems exist in the areas of articulation, dissemination of information concerning available program options, assessment, credentials, and the transition to employment. Included among those areas that demand particular attention by policymakers are the following: (1) expansion of opportunities for disadvantaged youth, (2) reforms to encourage increased participation of females in nontraditional occupations and in such nontraditional training programs as apprenticeships, and (3) resolution of the persisting discontinuities among general, technical, and vocational education. (MN)

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Education and Training after Basic Schooling

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In the past two decades there has been a rapid increase in the demand for education and training courses provided immediately after compulsory schooling. This is largely the result of rising living standards and educational aspirations, of the demands of the economy for higher qualifications and, more recently, of the difficult employment situation facing young people.

The present report examines the different policies adopted by countries in their attempts to provide a wide range of formal and non-formal education and training opportunities at the post-compulsory secondary level for the bulk of the 16-19 year-olds. It discusses the impact of current changes on general and vocational education, with particular reference to certain groups: the disadvantaged, the "average" students, girls and young women.

Detailed consideration is given to upper-secondary education because of its prominent role within the assembly of post-compulsory provision. This necessitates attention to its links with other levels of the education system and the key issue of the relationship between general, technical and vocational education.

The report was prepared by the Secretariat for a meeting at Ministerial level of the OECD Education Committee in November 1984. Dorotea Furth, of the Education and Training Division in the Directorate for Social Affairs, Manpower and Education, was the main author. Chapter IV was written by Geoffrey Squires of the University of Hull, as a consultant to the Secretariat. The report is published on the responsibility of the Secretary-General.

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Chapter 1

APPROACH AND CONTEXT

INTRODUCTION

In the past two decades there has been a rapid increase in the demand for education and training courses provided immediately after compulsory schooling. This is largely the result of the increase in standards of living of the population and corresponding rise in educational aspirations, of the employment demands for higher qualifications and, more recently, of the need to provide alternatives to unemployment to young people. Governments as well as the private sector have responded to these demands by developing a variety of education, training and work experience programmes for older adolescents, i.e. 16 to 18 or 19 year-olds, and by introducing changes in the organisation and objectives of upper-secondary education, including general, technical and vocational courses.

A comprehensive view on the problems of this age group is lacking. Equally lacking are clear policies for the coordination of the wide and changing array of options available, with differing aims and traditions, teaching styles and working methods, and often under rigidly separated administrations. This gives rise to serious problems for the young people themselves, for employers, and the public authorities concerned. In particular, planning and administration become increasingly complex, and this at a time when resources are scarce, youth unemployment is rising and there are also sharp demographic fluctuations. In addition, in most countries there are strong pressures for a definition of broader policies for youth and this provides the political context against which any discussion of policies for post-compulsory education and training has to take place.

The Youth Problem and Youth Policies

The youth problem is not new. For the past decades it has been a familiar and well documented phenomenon in most Western industrialised countries. But in spite of the growing attention devoted to youth concerns, of protective legal measures, of the greater freedom and choice of opportunities and, in general, of their improved material well-being, in many respects many young people today are experiencing greater difficulties in managing their transition to adulthood than past generations. This largely arises from the combined effect of the sharp decline in job opportunities and the apparent inability to set up alternative schemes that adequately respond to the needs and interests of the growing numbers coming out from compulsory schools and not entering employment – this, particularly, within education and training.

Against a background of economic recession, excluded from the job market, unable or unmotivated to find or keep a place in the education/training system, some segments of the youth population in Member countries are being *effectively marginalised.* Others, although occupied in various jobs or training schemes, develop the *feeling* of being "left aside" by a society which conveys to them the message that basically they are not needed in the labour force and that they are not suited for further education[1].

The main factors which contribute to aggravating the problems of young people are these:

a) The transition to adulthood has become a longer process for far more young people. The period of youth is thereby not only extended, but also in a certain way increasingly institutionalised. Rather than referring to transition, one now should speak of a new stage of young adulthood[2];

b) The stage of young adulthood involves far greater tensions and dilemmas than in the past. The greater freedom of career choice resulting from social and geographic mobility and the variety of options at least formally available imply a decision-making process with greater risks and more uncertainty – even more so in periods of economic recession;

c) In addition, "no institution has a clear and fully accepted responsibility for following the welfare of persons through the stage of young adulthood"[3]. At a time when the influence of the family – and often the school – is in decline and when links with the labour market are increasingly difficult to establish, many young people lack an organised setting which can protect them, to which they feel accountable and which can speak for them.

The weakened position of young people in the labour market and the need to provide them with adequate routes and/or alternatives to employment lead public authorities to assume greater responsibility for *all* young people and not merely those who are catered for by the formal education system. In a growing number of countries specific debates on education, training or work are set in the broader context of "youth policies" or of policies for certain age groups which roughly correspond to the various stages of formal education, i.e. 12-15, 16-19, 20-24 years old. This wider perspective has focused attention on the needs and interests of all young people in an age bracket, rather than on considering in relative isolation the various institutions or sectors where the young people are commonly found, i.e. different levels and types of schools, training programmes, labour market. It has also drawn attention to some of the drawbacks of past selective policies and of *ad hoc* or palliative measures introduced in specific sectors. Such an aggregate approach is by no means devoid of criticism, in particular in the way policies are implemented. In the view of many people, there are serious risks of too much government intervention in youth matters even if these take the form of protective measures; they are often considered to be based on political considerations and not always socially or psychologically desirable. Indeed, it is clear that, in the light of strong external constraints – such as the employment situation, availability of public resources, pressures from other interest groups – youth policies cannot be seen as responding exclusively to the needs and interests of the young people themselves.

In terms of the general direction of policies specifically relevant to the young people coming out of basic full-time compulsory schools, i.e. 15 to 19 years old, the majority of OECD countries tend to encourage the pursuit of various types of education and training as a more desirable alternative to subsidised employment, temporary work, unemployment benefits, etc. The increase in public responsibility which such policy entails is, however, interpreted in a variety of ways and the degree of government intervention in this area is currently a major political issue.

No OECD country seems to envisage the extension of full-time compulsory schooling beyond the age of 16 on a national scale. In some countries such as Japan and the United States where the end of basic schooling is more closely associated with completion of full secondary education, full-time school attendance up to the age of 17 is the established norm. Schooling is available for all young people until they complete their twelfth year of education but, with the exception of some states in the United States, school attendance is not legally enforced. Some European countries have opted or are planning for compulsory *attendance on a part-time basis* up to the age of 17 or 18. This has been for quite some time the policy in Austria, Germany and Switzerland; more recently Belgium and the Netherlands have adopted legislation in this sense.

Other countries have formally introduced the concept of a *right* to education at this stage. This right is understood in different ways: in Sweden, for example, it is a commitment to expand school provision so as to cover the whole age group leaving compulsory education. (This is also implicit in the educational policies of Japan and the United States). In Norway it is interpreted as an entitlement to some years of post-compulsory education which can be taken by individuals whenever they choose to come back.

The idea of a *youth guarantee*, originally developed in the Nordic countries and gradually adopted in various forms in other countries (United Kingdom and to some extent France), also implies granting rights to education[4]; but above all it entails, if not a legal responsibility, at least a stronger commitment on the part of public authorities to ensure a place in education, training or work to all young people within a certain age bracket. Until recently it was mainly for the 16 year-olds with the 17 year group gradually being included. In this respect it is interesting to note the quite rapid decrease of work places being made available under these schemes and the corresponding development of, and emphasis on, education and training options.

In countries where such global policies are not viable, participation in education or training is encouraged through indirect measures or incentives, or through specific government action in favour of various target groups, in particular the underprivileged or "those left aside". In general, therefore, transition to adulthood in the 1980s cannot be typified merely as a more drawn out and uncertain process than in the past; it also takes place increasingly under the charge of the public authorities, with the active participation of industry in providing training opportunities and work experience.

Scope of the Report

A series of recent OECD studies has dealt with the social and employment problems of young people[5], with youth attitudes towards education and work[6], and with initial vocational education and training[7]. Within the European region the Council of Europe has undertaken a series of studies dealing with various aspects of youth problems as part of its project on "Preparation for Life"[8]. The aim of the present report is to review policies concerning the provision of the wide range of education and training options that follow compulsory schooling and to discuss the problems, issues and dilemmas arising from their implementation. In view of the pre-eminent role that formal schooling occupies in most Member countries in catering for older adolescents, special attention is given to problems of upper-secondary education.

a) *Definition of terms*

Recognising the strong variations which exist in national situations and in the terminologies used, no attempt will be made in this report to conform to rigid definitions. A minimum of clarification is, however, necessary.

First, since the length of compulsory education and the statutory leaving age vary from country to country, the term *post-compulsory* will here refer to that level of education and training that follows immediately after basic full-time compulsory schooling and responds to the needs of the 16 to 18 or 19 year-old group. Typically, it encompasses upper-secondary schools, the upper or second cycle of secondary education, youth and further education, as well as established out-of-school training programmes, even where these are on a part-time basis. With a few exceptions post-secondary and higher education institutions have not been taken into consideration.

A second problem, more difficult to resolve, relates to the distinction between *formal* and *non-formal* education and training. However, some common criteria can be established. In general, the term "formal" is used to characterise institutions and programmes accredited by public authorities – notably but not exclusively by Ministries of Education – or special accrediting agencies that are easily recognised as part of an established and articulated system offering education and training, leading to recognised qualifications. Training programmes which do not meet all these criteria, but which are well established, such as apprenticeship schemes, have usually been included in this category. The term "formal" is preferred to "school sector" in that it allows a more comprehensive view of schemes provided on a regular basis which are considered in the different countries as integral parts of their established initial education and training systems. The extent to which these programmes are included systematically in national education statistics has been taken as a significant indicator of what constitutes the formal sector in each country.

The term "non formal" is far less amenable to a precise definition[9]. To the extent that data and information were available, it has been taken here to comprise a wide range of training schemes sponsored by governments and the private sector, of relative short duration (not shorter than 3 months), usually established on an *ad hoc* basis in response to immediate employment requirements and most often, outside the control of education authorities. Typical examples are training schemes developed in the framework of youth employment policies. Finally, the term "upper-secondary" is used in a broad sense to cover not merely schools but all formal post-compulsory secondary-level education and training schemes, e.g. apprenticeships, non advanced further education in the United Kingdom, TAFE in Australia.

b) *Structure of the Report*

Following this first chapter which establishes the context within which policies for post-compulsory education and training have to be formulated and implemented, the report sets out to review the various approaches adopted within the OECD area for the expansion and diversification of education and training opportunities for the 16-19 age group. This is the main theme of *Chapter II: Patterns of Provision* at the post-compulsory level. In view of the importance assigned to the formal school and college system in most countries, specific consideration is given to this in *Chapter III: The Institutions of Upper-secondary Education*, with particular reference to organisational questions.

In dealing with such a complex and intractable set of problems as underlie the design and content of post-compulsory programmes, *Chapter IV: Organisation and Content of Studies* aims to bring some conceptual clarification to this area and thus is more theoretical in its approach. Finally, *Chapter V: Choice, Allocation and Screening* reviews many of the problems and issues related to the increased responsibility assigned to this stage in the orientation, screening and allocation of students.

The future development of post-compulsory education and training will be strongly influenced by policies in other sectors as well as by internal pressures and policies within the education world itself. The relative impact of these pressures will vary: vocational training and special employment schemes are likely to be far more sensitive to external considerations than long-established programmes of academic-type education. It is clear that changes in the economic, technological and social context will be the dominating influence because the majority of young people undergo their initial education and training at this level.

Trends in Participation Rates in Formal Education

Overall trends in the recent quantitative development of formal post-compulsory education and training are available in a separate statistical survey recently completed by the OECD[10]. Here we need only concentrate on significant aspects of these trends during the 1970s when all countries except Canada and the United States (both of which had already high participation rates by the end of the 1960s) witnessed an expansion of enrolments. In a large majority, however, the pace of growth was slower during the latter half of the decade.

Figures on average growth rates of enrolments in different types of upper-secondary education (Table I.1) reveal considerable variations among countries. In the majority (notable exceptions are Japan and Portugal) there has been a gradual slowdown in the expansion of *general education* throughout the period. But such a trend must be seen in relation to the rapid growth this sector witnessed during the 1960s and to the large share it often represents within the total upper secondary provision (Table I.2). Comparisons are rendered difficult by the different classifications used, but it seems clear that the highest growth rates during the 1970s were in *full-time technical/vocational courses*. This was particularly evident in Austria, Belgium, Denmark, France, Italy, Spain and, as also reflected in Table I.3, is primarily due to the expansion of technical (as opposed to vocational) programmes. Whereas during the first half of the 1970s in most countries for which detailed information is available, enrolments in *part-time vocational education and apprenticeship* stagnated or declined in the latter half, nearly all witnessed growth. Figures for the early 1980s, however, show again slower expansion, stagnation and even fall in student numbers.

Analysis of the evolution in the distribution of enrolments among the different types of upper secondary education from 1970 to the early 1980s (Table I.3) does not point to any common or dominant trend within the OECD area. The number of countries where the share of students in general education – as opposed to technical/vocational education – increased over the period is practically the same as the number witnessing the opposite trend; moreover, in a few the relationship between the two sectors remained stable. In some it is very possible that the increase in the weight of general education programmes is over-estimated. Quite a number, e.g. Denmark, Germany, Switzerland, United Kingdom, have recently developed an additional year of full-time schooling beyond compulsory education – referred to as tenth year, pre-vocational year, foundation course, common core – after which students leave, continue on to a specific line of study or enter apprenticeship. Thus, a growing number of students attending the first year at the upper secondary level are included under general education even if subsequently they enrol in technical/vocational programmes.

Analysis of trends in the award of diplomas or certificates at the end of upper secondary education (Table I.2) - which in some respects are more significant than those in total enrolments - is problematic because of the limited number of countries for which information

Table I.1. **Annual average rates of enrolments in different types of upper-secondary education**
Full-time (FT) and Part-time (PT)

Percentages

	1965-70	1970-75	1975-80	1980-81	1981-82
Australia					
2nd cycle secondary	8.4	3.8	1.4	-0.5	2.3
Apprenticeship	2.4	4.4	3.2	4.3	
Austria					
General		3.1	1.9	3.4	0.5
Short technical		14.7	3.9	-6.3	1.4
Long technical		12.5	8.2	7.1	5.8
Vocational PT		5.4	3.1	-0.4	-1.8
Belgium[1]		(1972-75)			
General		9.5	3.1	7.4	0.9
Technical/vocational		12.8	4.0	6.3	3.2
Vocational education		32.5	10.9	18.6	12.5
Canada					
General[2]	5.8	0.5	-0.9	-4.1	-4.5
Denmark					
General	12.1	5.7	5.2	6.1	
Technical/vocational	6.5	6.7	20.0	8.5	
Apprenticeship	12.0	-2.8	-1.6	-10.2	
Finland					
General	5.4	4.0	3.6	1.7	1.4
Vocational lower level			4.0		
Vocational higher level			0.5	0.0	
Apprenticeship			13.9	-1.2	-0.9
France					
General	-1.1	7.8	2.4	-0.0	0.9
Short vocational	1.5	2.9	0.7	2.3	1.9
Technical	46.5	6.7	4.3	4.5	2.4
Apprenticeship		-4.9	9.0	1.5	-1.6
Germany					
General[3]	10.1	8.1	3.9	14.1	1.9
Comprehensive (general)		28.0	5.9	2.3	0.3
Vocational/technical FT	6.9	15.5	4.7	7.6	5.1
Vocational part-time	-2.2	-0.0	2.8	-2.1	-2.0
Greece		(1973-75)	(1975-79)		
General (1st and 2nd cycles)		4.2	3.1		
Technical/vocational: lower level		-0.1	-5.5		
Ireland			(1975-79)		
Secondary, second. "tops"	9.9	7.6	0.8		
Comprehensive, community		21.5	12.8		
Vocational (continuation and secretarial)			4.7		
Technical			-7.0		
Commercial			6.1		
Others			3.2		
Apprenticeship	9.9	-10.0	6.3		
Italy					
General	9.7	4.3	1.2	-0.5	0.7
Vocational	8.9	5.9	5.2	2.3	3.0
Technical	3.8	6.6	3.0	0.0	1.6
Teacher training	1.0	-2.2	3.6	1.6	-1.5
Japan					
General	-3.9	2.0	2.9	2.6	-0.9
Vocational	-3.0	-1.8	-1.7	-1.5	-3.6
New Zealand					
General (5th to 7th form)	5.0	3.4	3.1	-1.0	-1.6
Secondary school PT		1	-1.5	-24.1	-3.4
Technical Institutes FT		1.7	5.2	-9.4	4.0
Technical Institutes PT			-3.1	-5.0	
Correspondence courses			6.0	-10.0	12.0

Table I.1 *(cont'd)*

	1965-70	1970-75	1975-80	1980-81	1981-82
Netherlands					
General FT		9.5	3.5	1.4	2.0
Technical/vocational FT		6.3	8.1	10.0	11.4
General PT			19.3	22.8	11.2
Technical/vocational PT		-7.2	5.8	7.2	5.9
Training on the job[4]		-5.5	2.7	0.2	0.1
Norway					
Folk high school	3.2	2.5	-0.1	-1.0	
Old upper secondary schools	4.2	5.4			
Old vocational schools	3.4	2.4			
New upper secondary schools					
General education			3.0	-1.7	
Vocational/technical education			4.1	1.8	
Portugal			(1975-79)		
General (7th to 9th year)		5.9	15.8		
General (10th and 11th year)		22.5	12.6		
Technical/vocational (general)		-0.8	-22.5		
Complementary courses		18.6	-22.5		
Spain					
General[5]	11.7	-11.9	5.9	3.0	
Vocational training	5.0	15.0	12.9	10.8	
Other secondary education	11.5	11.9	10.0		
Sweden		(1971-75)			
3/4-year courses		-3.8	4.6	8.6	7.4
2-year courses		8.3	5.6	7.9	3.3
Special courses[6]		-10.0	-0.5	-8.9	14.1
Switzerland			(1977-80)		
General FT			6.8	3.0	2.1
General PT			-5.5	29.3	-0.9
Teacher training FT		-7.2		-2.3	5.0
Vocational education FT			15.2	6.8	1.4
Vocational education PT				10.3	1.8
Apprenticeship			2.6	2.4	2.1
Turkey					
General		9.5	6.8	1.1	
Technical/vocational		17.6	3.5	-2.0	
Manual		4.9	2.6	12.5	
United Kingdom[7]	(1964-70)	(1970-74)	(1974-78)	(1979-81)	
Secondary	5.4	7.7	2.5	7.1	
FE non-advanced FT	6.0	9.6	8.2	12.4	
FE non-advanced PT[8]	1.5	1.3	-1.2	-2.8	-2.7
United States					
General[2]	2.5	1.3	-1.2	-2.8	-2.7
Yugoslavia	(1965-69)	(1969-75)			
General/common core[9]	1.0	8.7	29.5		
Teacher training	-6.5	-13.0	4.4		
Training qualified workers	8.4	-1.8	-7.9		
Other technical/vocational schools	-2.2	6.2	-6.4		

1. French and German speaking courses only. Comparisons over time, in particular between 1972 and 1975 are difficult in view of the gradual introduction of a new secondary education system (=enseignement rénové=).
2. As from the 9th year of studies, that is including pupils who have not reached the statutory leaving age which varies in the different provinces and states.
3. Including evening courses and colleges of secondary education.
4. With or without an apprenticeship contract.
5. Old system for 1965-1970; new system as from 1975; the two series of data are not comparable.
6. Courses of variable duration: a few weeks to one year or more for specific trades.
7. Pupils who are 16 to 18 years old although in 1970 the statutory leaving age was 15.
8. Including advanced level courses. Day classes only.
9. Created in 1975. This explains the important increase of enrolments in general education and the decrease in other types of education.

Source: Educational Trends in the 1970s: OECD, Paris 1984. Completed with information provided by national authorities.

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Table 1.2. **Annual average growth rates of graduates in different types of upper-secondary education**
Full time (FT) and Part time (PT)

Percentages

	1965-70		1979-75		1975-80		1980-81		1981-82	
	M	F	M	F	M	F	M	F	M	F
Austria			(1970-73)							
General			3.7							
Belgium[1]			(1972-75)							
General			3.7		2.2		0.6			
Technical			1.0		0.7		4.7			
Vocational			3.3		13.4		8.3			
Diploma giving access to higher education			0		9.8		0.5			
Canada										
High school	11.1		3.2		8.2[2]					
Denmark										
General			7.8		1.4		-13.1			
Technical/vocational			5.5		21.5		22.4			
Apprenticeship			-17.5[3]		5.1		-19.9			
Finland										
General	5.6	7.1	5.7	6.7	-2.5	3.9	25.0	2.2		
Vocational lower					6.5	3.5	-0.8	2.3		
Vocational upper					2.0	4.1	-3.7	-3.3		
France										
General (Bac)	7.0		2.2		0.8		1.5		4.9	
Vocational short	0.4	1.2	4.3	4.3	3.1		6.0		7.5	
Technical long	85.0	55.0	6.1	11.2	4.3		1.9		8.5	
Germany										
Giving access to higher education										
General	10.6		7.2		6.2		17.1		8.5	
Technical			47.0		2.2		15.6		17.7	
Vocational PT			-0.6		3.6		4.8		3.7	
Vocational FT			3.9		9.3		2.4		18.0	
Greece					(1975-79)					
General	3.7		7.6	8.3						
Technical lower			5.7[4]	5.9[4]	0.8	1.3				
Technical/vocational middle			27.0[4]	5.4[4]	22.0	34.0				
Ireland										
Leaving certificate	11.7		10.4		3.0					
Italy										
Classical/scientific "Maturity"	8.8	13.3	4.5	9.9	-0.2		-3.4			
Teacher "Maturity"	11.9	9.5	-8.0	-3.5	0.8		7.2			
Technical "Maturity"	27.5	17.4	2.7	11.7	2.8		1.7			
Vocational/artistic "Maturity"	17.9		1.3		5.9		13.9			
Teacher "License"					5.4[5]					
Vocational/artistic qualification	4.4	5.3	1.7	5.2	1.8					
Japan										
High school	4.9		-1.1		-0.2		1.8			
Netherlands	(1967-70)									
General short			15.9	9.3	3.8	5.9				
General long	-0.2	6.8	-2.0	7.7	3.3	6.2				
Vocational, 2nd cycle FT			8.5	3.1	8.1	0.7				
Vocational, 2nd cycle PT			-10.0	5.3						

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Table I.2. *(cont'd)*

	1965-70		1970-75		1975-80		1980-81		1981-82	
	M	F	M	F	M	F	M	F	M	F
Norway										
Old exam artium		6.0		5.4						
New upper secondary schools										
Stage II (11th-12th grades)						8.1		9.1		
Portugal										
General (9th year)				17.6		13.4[6]				
General (11th year)				21.5		4.3[6]				
Technical/vocational (general courses)				13.8		−12.0[6]				
Technical/vocational (complementary courses)				55.5		10.1[6]				
Spain[7]										
General				23.0		2.9		6.6		
Vocational training		−7.1		9.2		34.0				
Sweden				(1972-75)						
3/4-year courses			−3.5	−5.5	1.6	4.3	10.7	16.0	8.2	15.2
2-year courses			−1.9	7.2	5.0	4.7	4.7	11.5	5.9	4.7
Special courses[8]			−8.0	−2.5	−2.8	−1.0	−5.2	−2.5	23.6	−1.1
Turkey										
General				14.2		4.3				
Technical/vocational				17.5		4.3				
Teacher education				6.1		−22.0				
United States	(1966-70)									
High school	2.4	2.6	1.5	1.7	−0.6	−0.5	−0.5	−1.0	−0.8	−0.4
United Kingdom										
School leavers by highest qualification					(1975-79)		(1979-81)			
GCE A level/SCE										
H Grade	3.3	5.1	1.6	2.0	1.3	3.6	3.7	5.2		
GCE O level/CSE/SCE										
O Grade	1.7	3.6	8.6	9.0	3.9	4.2	0.6	0.6		
No higher grade	0.4	0.8	2.8	2.8	2.0	1.3	−2.4	−2.5		
Yugoslavia										
General		6.9		3.3		13.3				
Teacher education		2.3		−20.0		16.7				
Technical		2.2		5.6		8.1				
Vocational		6.2		2.0		4.6				

1. French and German speaking courses only, including certificates acquired in the context of further education which represented 27 per cent in 1972 and 36.5 per cent in 1981 of the total of technical certificates and for the same years 6.9 and 9.2 per cent for vocational certificates.
2. This high rate is due to the reorganisation of the educational system of one of the Provinces.
3. Commercial branches only.
4. 1973-75.
5. 1975-78.
6. 1975-79 for the general, 1975-77 for the technical/vocational.
7. The reorganisation of secondary education and vocational training explains the variations between 1975 and 1980.
8. Courses of variable duration – a few weeks to one year or more – attached to different gymnasium sections and preparing for specific trades, which do not require studying the full course.

Source: *Educational Trends in the 1970s, op. cit.* Completed with information provided by national authorities.

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Table I.3. Trends in the distribution of enrolments in different types of upper-secondary education

Full-time (FT) and Part-time (PT)

Percentages

	1970				1975				Latest available year**			
	Vocational	Technical	Vocational and technical	General* education	Vocational	Technical	Vocational and technical	General* education	Vocational	Technical	Vocational and technical	General* education
Austria	66.0	11.1	77.1	22.9	67.7	13.8	81.5	18.5	63.5	19.1	82.6	17.4
Belgium[1]	11.4[2]	31.0[2]	42.4[2]	57.6[2]	18.1	30.3	48.4	51.6	27.7	27.8	55.5	44.5
Denmark	47.4[3]	19.3	66.7	33.3	37.8[3]	22.1	59.9	40.1	21.5[3]	41.0	62.5	37.5
Finland					37.2	15.9	53.1	46.9	39.2	13.9	53.1	46.9
France	49.4[4]	8.8	58.2	41.8	48.7	10.9	59.6	40.4	47.7	12.5	60.2	39.8
Germany	75.5	10.2	85.7	14.3	70.4	12.0	82.4	17.6	68.7	10.8	79.5	20.5
Greece	20.5[5]	1.9[5]	22.4[5]	77.6[5]	19.0	2.5	21.5	78.5	14.0	4.5	18.5	81.5
Ireland	31.5[6]	2.0[6]	33.5[6]	66.5[6]	33.2	0.8	34.0	66.0	32.1	0.6	32.7	67.3
Italy	18.1	40.9	59.0	41.0	19.1	44.5	63.6	36.4	21.6	44.5	66.1	33.9
Japan			41.5	58.5			37.0	63.0			30.3	69.7
Netherlands	37.3	30.9	68.2	31.8	24.9	30.7	55.6	44.4	20.4	38.9	59.3	40.7
New Zealand							26.4	73.6			24.6	75.4
Norway			55.0	45.0			51.7	48.3			56.4	43.6
Portugal												
7th-11th year			45.2	54.8			36.3	63.7			9.6	90.4
10th-11th year			22.2	77.8			22.9	77.1			27.8	72.2
Spain	8.4	6.4	14.8	85.2	23.0	15.4	38.4	61.6	29.9	15.9	45.8	54.2
Sweden	27.2	47.2	74.4	25.6	19.0	52.9	71.9	28.1	13.9	56.1	70.0	30.0
Switzerland					68.8[7]	6.0[7]	74.8[7]	25.2[7]	66.8	8.3	75.1	24.9
Turkey	11.1	12.7	23.8	76.2	16.3	15.2	31.5	68.5	14.0	13.8	27.8	72.2[8]
United Kingdom[9]			39.5	60.5			31.1[10]	62.9[10]			43.3[11]	56.7[11]
United States			24.0[12]	76.0[12]							24.0	76.0

* Includes teacher training.

** 1979 Greece, Ireland, Portugal; 1980 United States; 1982 Austria, Belgium, France, Germany, Italy, Japan, Netherlands, New Zealand, Sweden; 1981 Denmark, Finland, Norway, Spain, Turkey, United Kingdom; 1983 Switzerland.

1. French and German speaking courses only.
2. 1972.
3. Apprenticeship.
4. Not including apprenticeship.
5. 1973.
6. 1965.
7. 1977.
8. Increase due to the growth in the number of pupils enrolled in moslem teacher training schools.
9. Students from 16 to 18 years old. In view of the available information it was estimated that two-thirds of full-time students and 90 per cent of those enrolled in part-time day courses in Further Education were enrolled in technical/vocational education.
10. 1974.
11. Changes in dates of data collection – from 31st December to preceding 31st August – have had greater effects on student numbers in secondary schools than on those in Further Education.
12. 1971.

Source. *Educational Trends in the 1970s, op. cit.* Completed with information provided by national authorities.

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is available. But when seen in combination with Table I.4 (changes in the distribution of graduates from different types of upper-secondary education) they confirm that in a majority of European countries the expansion of upper-secondary education in the late 1970s increased the weight of the technical and vocational sector within the total provision. Significant exceptions were Germany and Sweden where, despite the traditionally dominant role of this sector, the balance was redressed in favour of general education. In the Netherlands, much of the expansion was channelled through short-cycle general but non-academic type courses. The particular situation of Portugal is explained by the prevailing policy in the course of the late 1970s to phase out vocational education at the upper secondary level. Finally, special mention should be made of Canada, Japan and the United States where the large majority of students attend general/academic-type programmes and most vocational training leading to qualifications is provided beyond the upper secondary level.

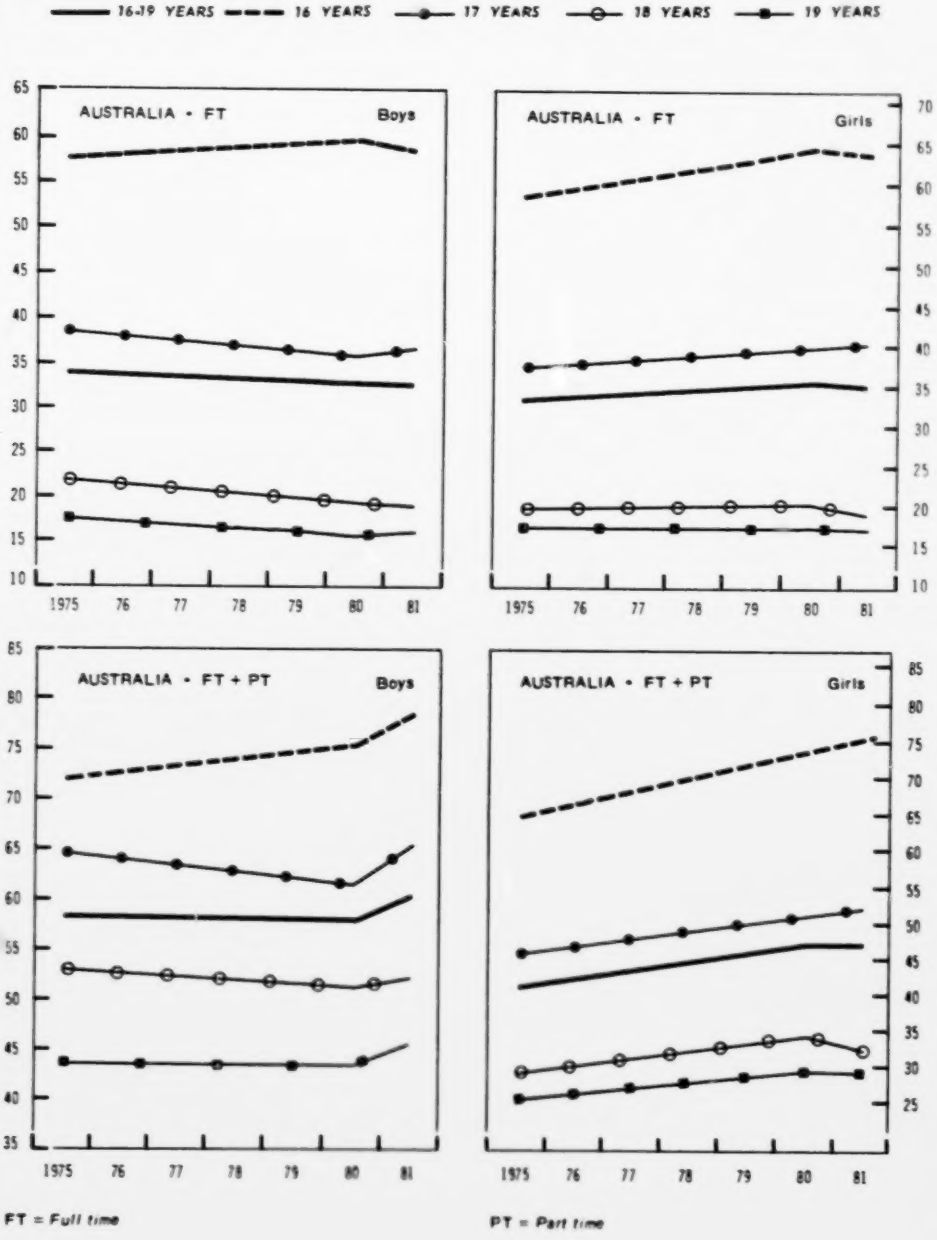
The increase in the proportion of female enrolments at the upper-secondary level (Table I.5) is also evidence of the larger contribution of girls to the recent overall expansion of this sector. Most countries, however, witnessed only a marginal increase over the decade, since by the early 1970s they had already achieved a rather even balance in participation rates by sex. The exceptions at the time were Spain in particular, but also Denmark, Greece, Italy, the Netherlands and the United Kingdom. By 1980 the share of girls in total enrolments at this level was around 50 per cent in Australia, Canada, Finland, France, Japan, the Netherlands, Spain and Sweden. A more detailed examination of this table reveals substantial differences between the sexes in the types of upper secondary studies they pursue. In practically all countries the proportion of young women in general education continued to grow over the decade. In many of them girls are by now quite strongly over-represented in this sector (Sweden nearly 80 per cent, Finland above 60 per cent, Denmark, France, Ireland, Norway above 55 per cent). Whereas female participation rates also increased in the technical and vocational branches, trends in this area vary, depending on the structure and volume of the technical/vocational sector. As a rule, female participation rates increased more rapidly in full-time programmes and remain heavily under-represented in apprenticeship. A more detailed analysis is presented in Chapter II.

Whereas during the early 1970s the growth of enrolments clearly reflected an increase in participation rates of the 16-19 age group, more recently such growth seems to have been increasingly due to the presence of larger cohorts (see graphs). Exceptions are France, Greece, Norway and Spain, where participation rates increased steadily at the turn of the decade. A decline in participation rates among this age group is observed only in the United Kingdom since 1975, and among the male population in the United States throughout the 1970s.

These overall figures conceal substantial differences which emerge if each single year of age is considered separately. Enrolment rates of 16 year-olds increased regularly in most countries; a similar, although less clear-cut trend, is observed among 17 year-olds. This shows that in the course of the 1970s a common pattern within the OECD area was for young people to prolong their studies one year after the end of compulsory schooling but no longer. There are indications, however, that two years of post-compulsory education or training is gradually becoming the norm in a number of countries, as in fact has been the case in North America and Japan for some time now.

The participation rates of 18 and 19 year-olds evolved along a similar pattern in most Member countries. In all European countries (except Sweden and the United Kingdom) they increased over the 1970s; but it can be assumed that much of the growth is accounted for by the expansion of female enrolments. Indeed, when figures are broken down by sex, even in countries witnessing stagnation or decline, e.g. Australia, United Kingdom, the United

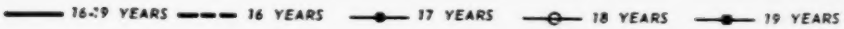
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19

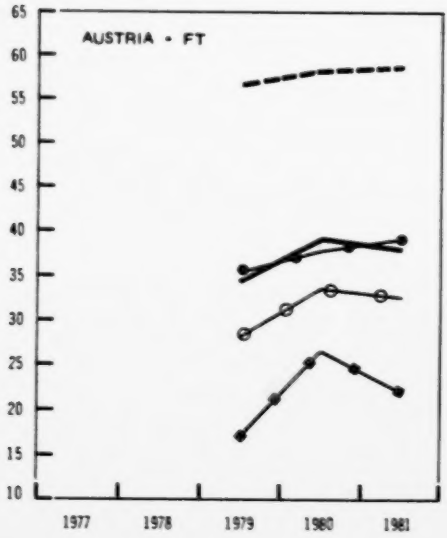


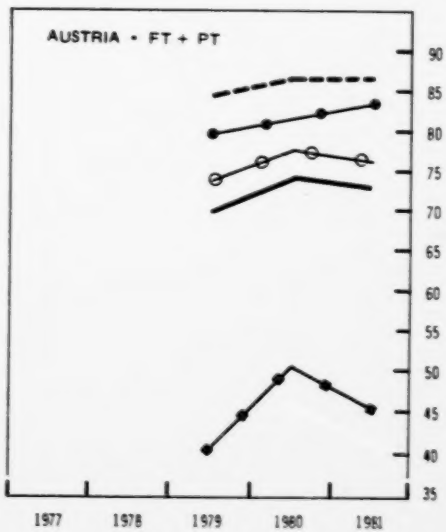
FT = *Full time*

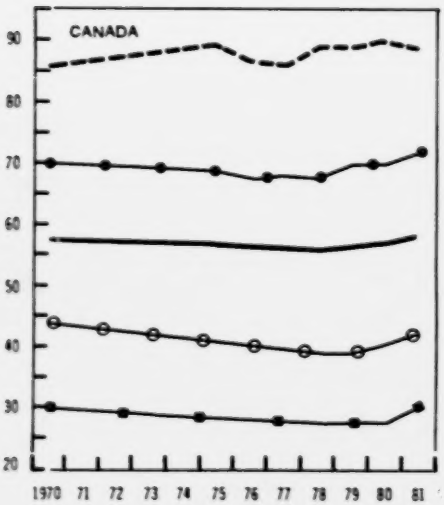
PT = *Part time*

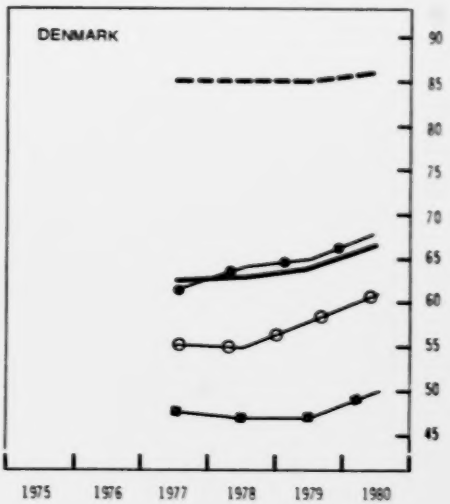
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19



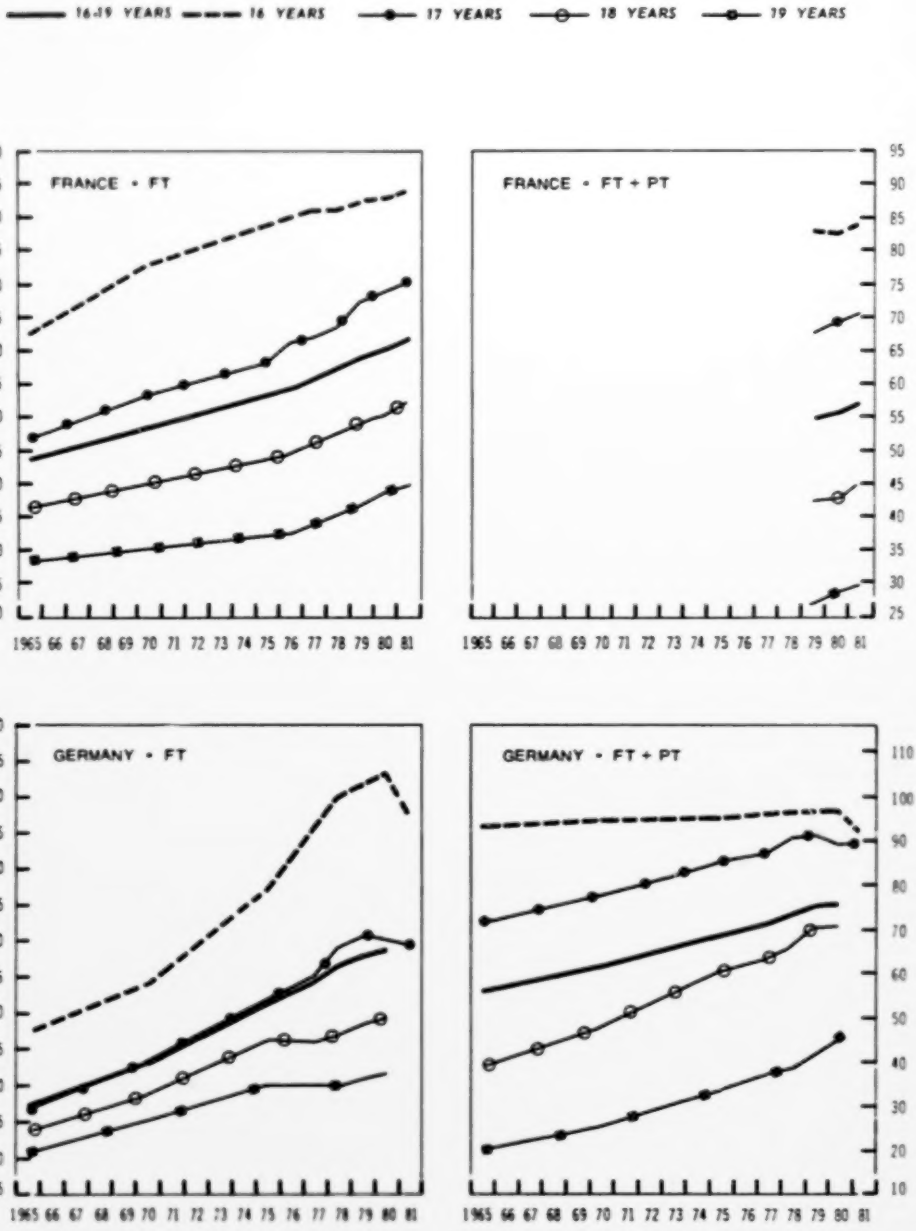








TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19


16-19 YEARS
16 YEARS
17 YEARS
18 YEARS
19 YEARS
FRANCE - FT
FRANCE - FT + PT
GERMANY - FT
GERMANY - FT + PT
1965 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81

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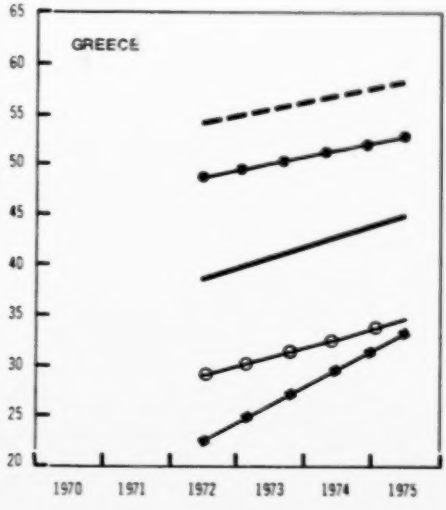
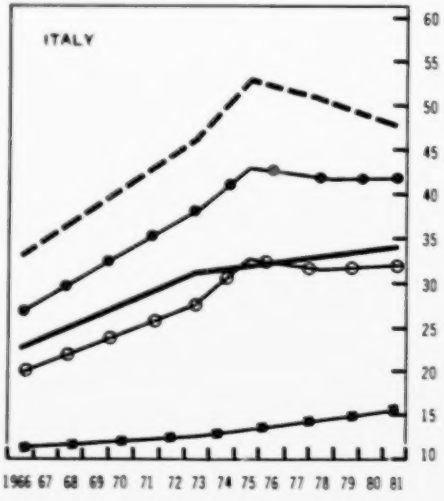
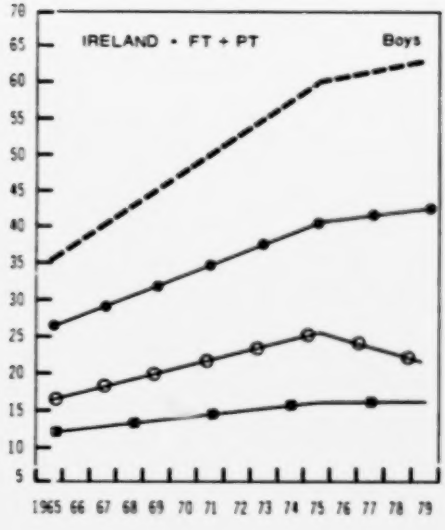
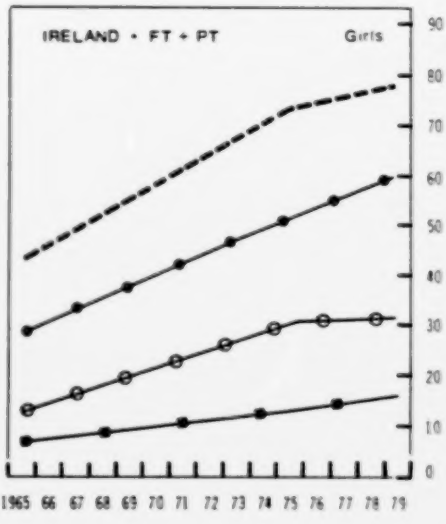
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19

16-19 YEARS — 16 YEARS — 17 YEARS — 18 YEARS — 19 YEARS









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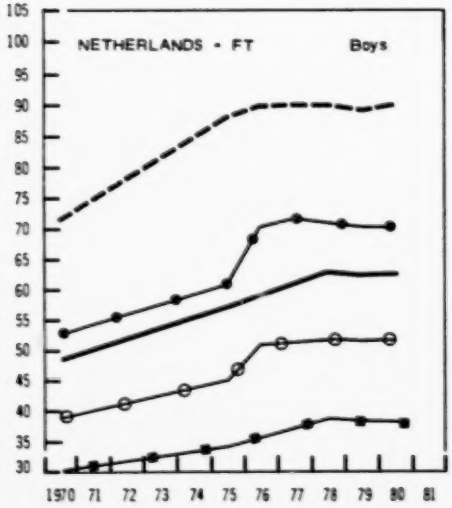
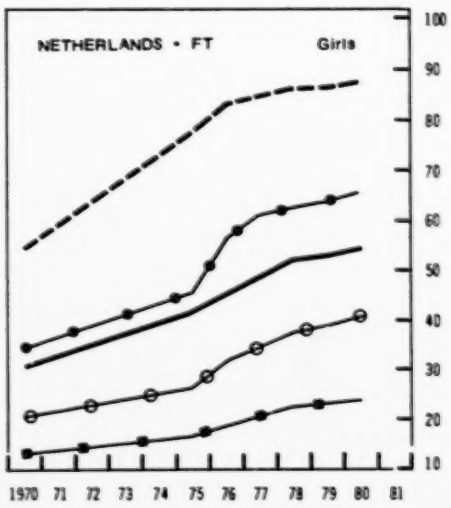
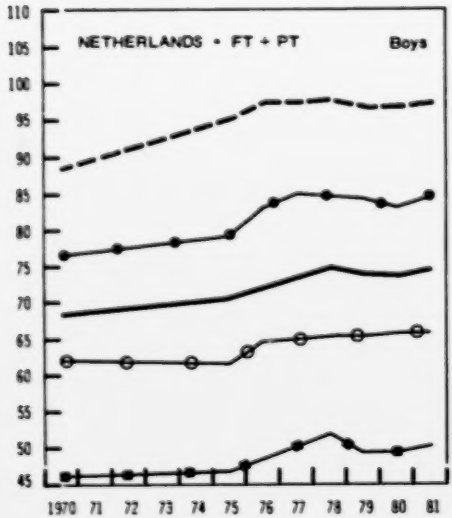
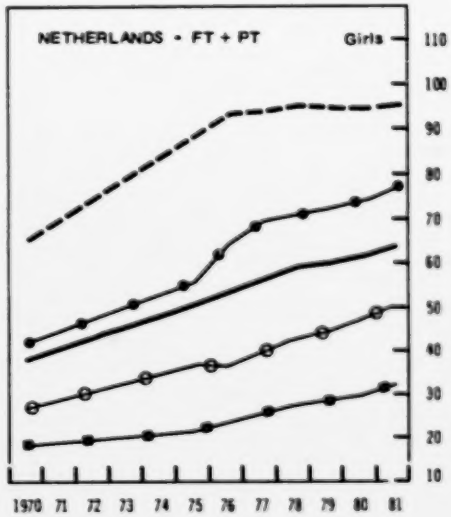
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19

16-19 YEARS — 16 YEARS — 17 YEARS — 18 YEARS — 19 YEARS









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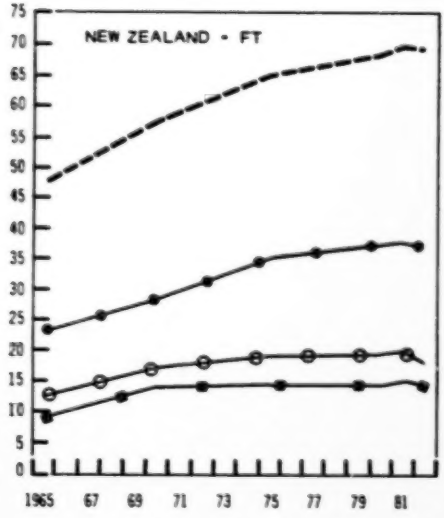
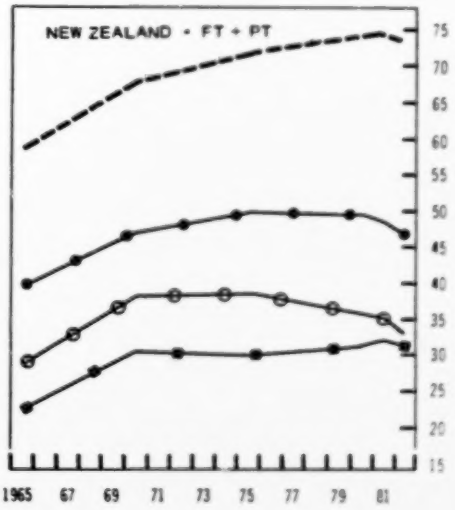
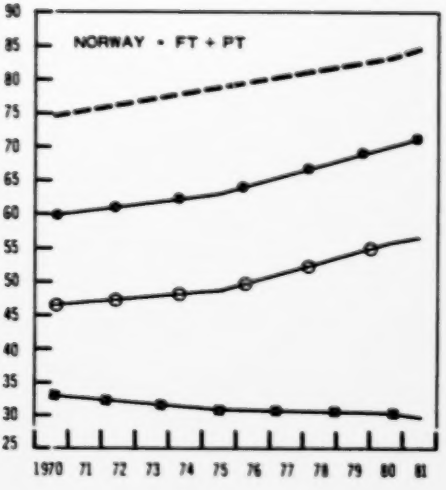
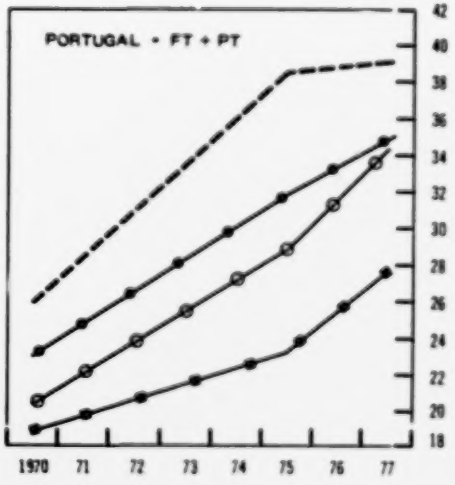
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19

16 YEARS — 17 YEARS — 18 YEARS — 19 YEARS





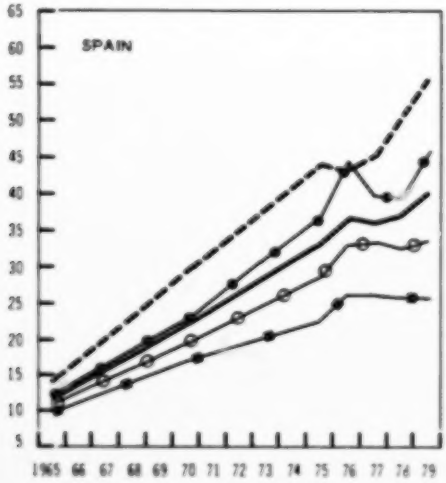


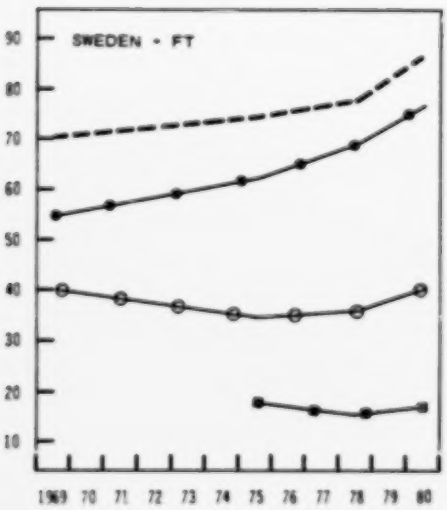


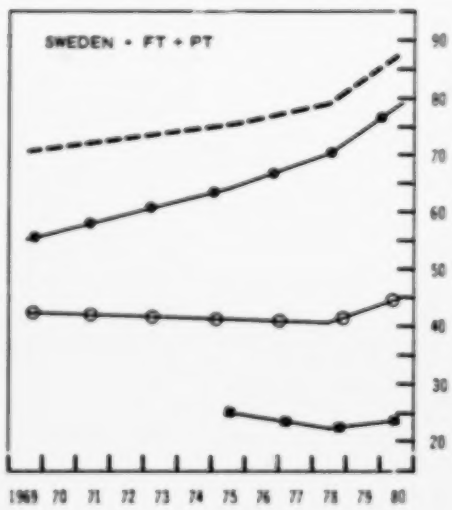
23

TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19

16-19 ANS — 16 ANS — 17 ANS — 18 ANS — 19 ANS







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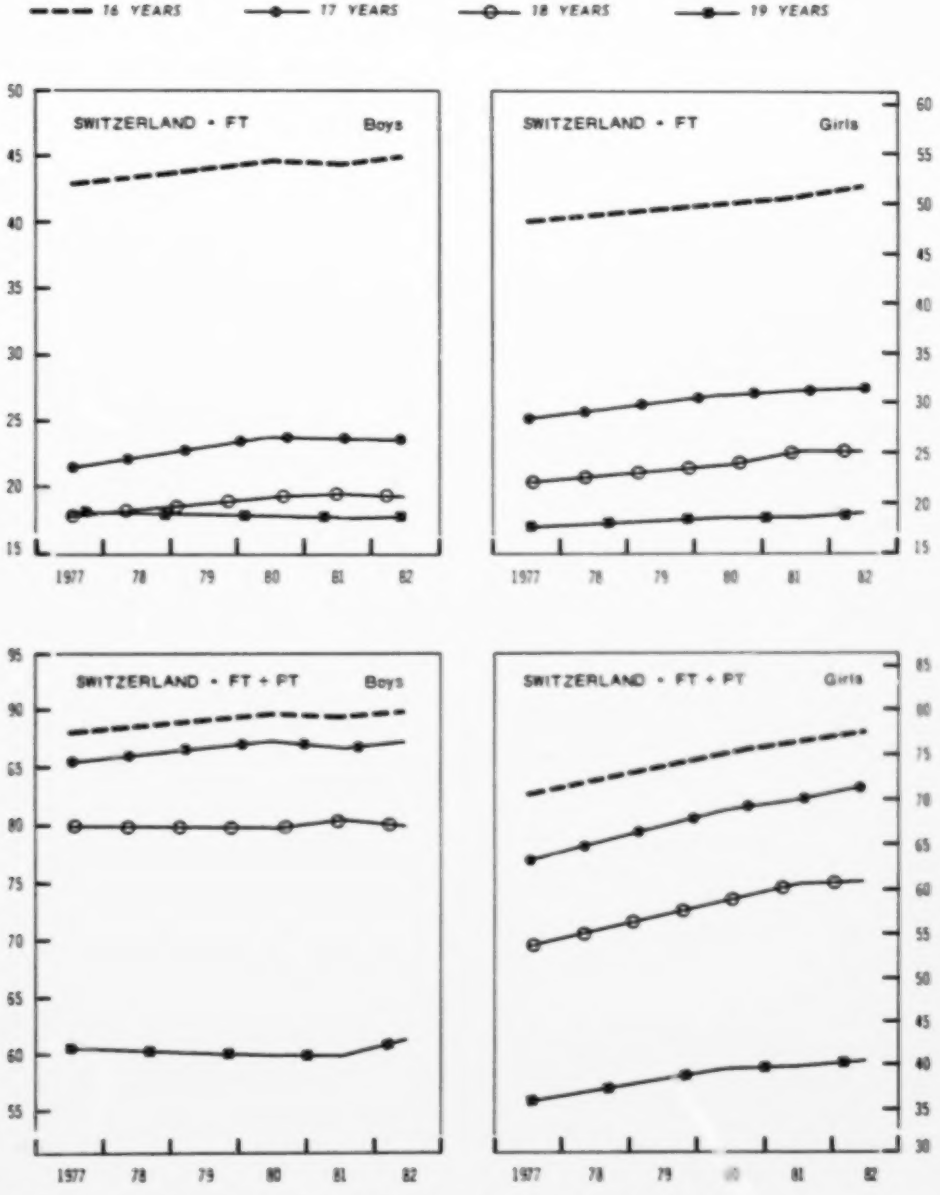
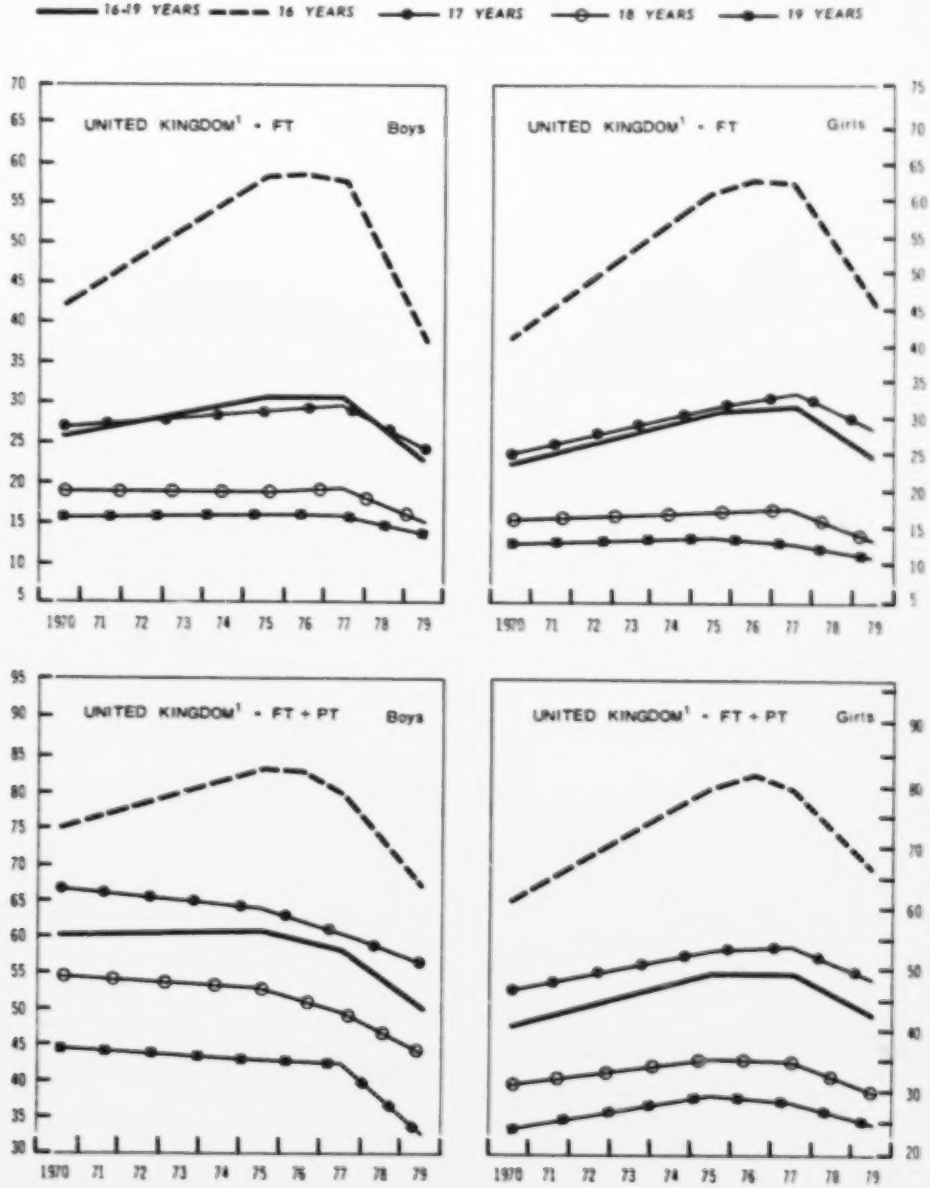
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19



Source : *Educational Trends in the 1970s : A Quantitative Analysis*, OECD, Paris, 1984.

TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19



1. In 1979, age at 31st August i.e. at beginning of academic year and not at 31st December as for the previous years. This explains, totally or partially, the decrease of the enrolment rates, particularly at the age of 16 and 17.

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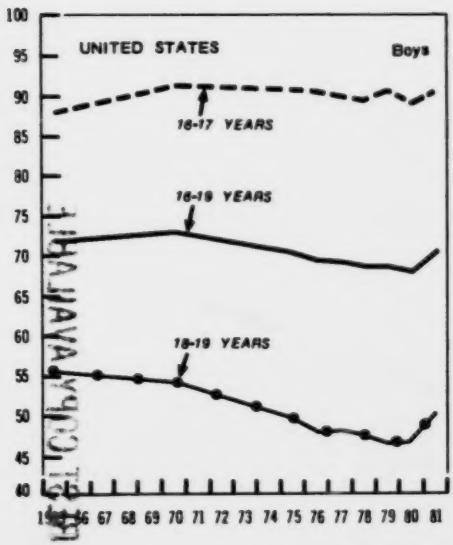
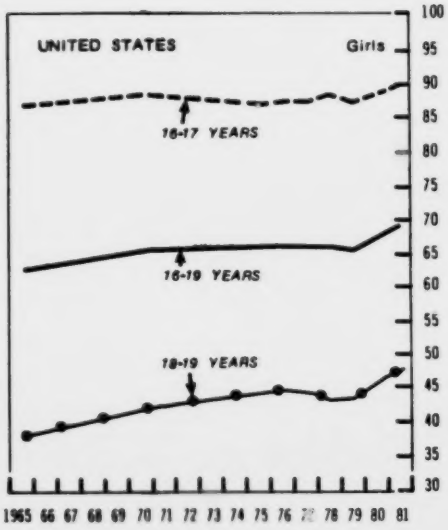
TRENDS IN PARTICIPATION RATES OF POPULATION AGED 16 TO 19

16-19 YEARS — — — 16 YEARS —●— 17 YEARS —○— 18 YEARS —●— 19 YEARS





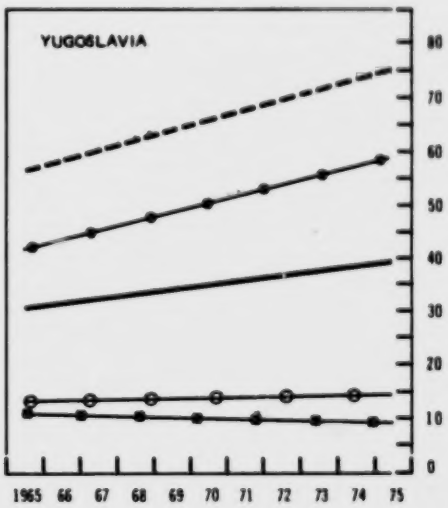


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Table I.4. **Trends in the distribution of graduates**

Percentages

	1970				1975				Latest available year**			
	Vocational	Technical	Vocational and technical	General* education	Vocational	Technical	Vocational and technical	General* education	Vocational	Technical	Vocational and technical	General* education
Belgium[1]	9.6[2]	46.5[2]	56.1[2]	43.9[2]	9.9	44.6	54.5	45.5	16.8	40.4	57.2	42.8
Denmark					29.5[3]	33.9[3]	63.4[3]	36.6[3]	17.3	63.2	80.5	19.5
Finland					51.1	13.9	65.0	34.9			67.7	32.3
France	54.8	9.3	64.1	35.9	55.5	11.6	67.1	32.9	59.4	12.3	71.7	28.3
Germany	87.0	1.1	88.1	11.9	78.0	7.0	85.0	15.0	75.0	7.3	82.3	17.7
Italy[4]	23.4	33.9	57.3	42.7	26.9	35.3	62.2	37.8	26.7	37.0	63.7	36.3
Netherlands			37.3	62.7			36.2	63.8			34.9	65.1
Norway												
11th and 12th year							49.5	50.5			57.2	42.8
Portugal												
9th year			41.3	58.7			37.4	62.6			20.1	79.9
11th year			6.1	93.9			19.7	80.3			21.6	78.4
Spain	18.6	9.9	28.5	71.5	14.9	15.1	30.0	70.0	33.9	8.7	42.6	57.4
Sweden	41.0[2]	39.3[2]	79.3[2]	19.7[2]	38.3	40.1	78.4	21.6	28.6	45.5	74.1	25.9
Turkey	11.4	13.4	24.8	75.2	13.5	15.7	29.2	70.8	15.3	17.2	32.5	67.5

* Includes teacher training.

** Belgium – 1981, Denmark – 1980, Finland – 1981, France – 1982, Germany – 1982, Italy – 1981, Netherlands – 1980, Norway – 1980, Portugal – 1977, Spain – 1981, Sweden – 1982, Turkey – provisional figures for 1980.

1. French and German speaking courses only.
2. 1972.
3. 1974.
4. Including licenses of vocational, artistic and teacher training courses of a lower level than the "maturità".

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Table I.5. **Female enrolments as a proportion of total enrolments in different types of upper-secondary education**

Full-time (FT) and Part-time (PT)

Percentages

School year beginning in	1965	1970	1975	1980	1981	1982	1983
Australia							
2nd cycle secondary	45.3	46.3	48.7	50.7	50.9		
Austria							
Secondary 2nd cycle		47.7	51.8	52.4	52.9		
Technical short		73.1	55.5	46.4	51.8		
Technical long		30.7	34.6	41.9	43.8		
Vocational PT		33.3	31.4	32.3	32.8		
Total NC		42.8	41.4	40.9	42.4		
Belgium[1]		(1972)					
General		48.4	51.5	52.1	52.3	52.6	
Technical		45.2	40.8	45.7	45.0	44.4	
Vocational		81.2	60.3	57.4	55.7	53.6	
Total NC		51.1	49.9	51.5	51.1	50.6	
Canada							
10th year of study and beyond	48.2	48.7	49.1	48.9	49.1	49.1	
Denmark							
General 2nd cycle	45.9	48.4	52.1	57.1	57.8	58.9	
Technical/vocational	58.5[2]		46.5	55.1	55.9		
Apprenticeship	61.1[2]	38.3	18.7	16.0	13.4		
Total NC			38.3	43.9	44.1	44.1	
Finland							
General-gymnasium	56.1	57.5	59.3	61.0	61.1		
Vocational lower level			42.2	42.9	43.0		
Vocational higher level			50.5	51.6	52.3		
Total NC			53.4	54.3	54.4	54.7	
France							
2nd cycle general	50.9	53.8	55.7[3]	58.5	57.6	57.3	
Vocational short	54.7	49.4	47.5	47.7	47.9	47.7	
Technical	35.6	47.8		54.4	55.0	53.9	
Apprenticeship		21.2	21.4	23.2	23.8	24.8	
Total NC		47.7	49.5	50.3	50.1	49.9	
Germany							
Gymnasium 2nd cycle	37.8	41.4	46.4	49.2	49.7	60.0	
General comprehensive			48.3	48.2	48.0	47.8	
Technical/vocational FT	63.3	51.6	55.2	53.6	52.9	56.2	
Vocational PT	44.1	41.9	40.0	40.1	40.1	40.3	
Total NC	44.3	43.6	45.6	45.7	46.0	46.4	
Greece		(1973)		(1979)			
2nd cycle general		49.0	49.3	49.3			
Technical/vocational lower level		14.1	13.1	18.7			
Technical/vocational middle level		27.2	28.6	36.3			
Total NC		41.4	41.9	44.4			

Table I.5. *(cont'd)*

School year beginning in	1965	1970	1975	1980	1981	1982	1983
Ireland				(1979)			
Secondary, second. tops	50.0	53.8	60.0	57.7			
Comprehensive, community		50.0	52.4	57.4			
Vocational (continuation and secretarial)	33.5		57.9	57.4			
Technical			50.0	83.3			
Commercial	95.5		100.0	89.5			
Others	47.4		26.7	29.4			
Apprenticeship	5.0	0.5	2.7	3.5			
Total NC	39.9		52.9	51.0			
Italy							
2nd cycle general	38.6	43.2	47.2	50.1			
Vocational	37.0	41.4	45.2	45.7			
Technical/artistic	23.8	25.9	32.8	37.9			
Teacher education	86.7	89.2	92.3	93.7			
Total NC	39.4	41.6	44.3	47.8			
Japan							
2nd cycle general	52.2	52.9	51.5	51.2	51.3	51.3	
Vocational training	40.3	43.0	45.4	45.2	45.1	45.9	
Total NC	40.8	48.8	49.2	49.3	49.9	49.7	
New Zealand							
General (5th to 7th form)	45.5	46.9	49.0	49.8	50.1	50.8	
Secondary schools PT			59.0	72.1	67.5	70.8	
Technical institutes PT		77.3	79.2	80.6	80.0	84.6	
Technical institutes FT			27.0	31.9	32.2	32.2	
Correspondence courses			12.7	23.4	28.8	30.0	
Total NC			42.8	47.0	47.6	48.3	
Netherlands							
2nd cycle general FT	41.7	45.4	49.5	50.2	50.6		
2nd cycle technical/vocational FT	46.4	41.0	43.6	44.5	45.6		
2nd cycle general PT	23.0	41.3	65.0	66.3	66.7		
2nd cycle technical/vocational PT	32.0	49.5	52.0	51.8	51.0		
Apprenticeship	6.2	15.8	21.1				
Young worker education	56.6	54.8	58.1				
Total NC	37.6	41.5	48.0				
Norway							
Folk high schools	66.6	69.0	75.0	72.7	73.7		
Old upper secondary schools	42.8	46.1	53.1				
Old vocational schools	39.4	41.7	44.5				
New general education				54.7	55.3		
New vocational/technical education				45.3	46.1		
Total NC	42.3	45.0	49.1	51.2	50.5		
Portugal				(1979)			
Common school			49.7	51.6			
Further education				54.3			
Lycée		50.0	53.3	54.2			
Total general			52.1	52.6			
Technical/vocational FT and PT		35.5	36.3	31.1			
Others		86.5	87.8				
Total NC		43.3	48.1	50.5			

Table I.5. *(cont'd)*

School year beginning in	1965	1970	1975	1980	1981	1982	1983
Spain							
2nd cycle general/teacher education	40.3	43.2	48.8	53.5	53.7		
Technical and other	29.5	33.5	60.3	64.0	64.0		
Vocational training	3.3	5.1	28.9	37.9	39.4		
Total NC	27.3	37.5	46.4	49.8	50.4		
Sweden		(1971)					
3 to 4-year courses		42.3	41.4	45.6	46.6	47.6	
2-year courses		47.2	51.5	51.4	51.3	50.7	
of which: general courses		76.2	79.8	78.9	79.5	79.5	
technical courses		26.8	29.1	31.1	32.1	33.1	
Special vocational courses[4]		46.8	58.3	62.0	63.7	58.0	
Total NC		45.0	48.9	50.7	51.0	50.4	
Switzerland			(1977)				
General education FT			48.5	49.7	50.0	50.3	50.5
General education PT			40.7	48.6	52.4	50.0	48.9
Teacher training FT			73.3	78.1	78.8	79.3	80.0
Vocational education FT			66.3	63.0	63.6	63.7	63.2
Vocational education PT				35.4	41.1	40.7	40.1
Apprenticeship			33.8	36.1	36.1	36.3	36.6
Total NC			40.5	42.6	42.9	43.1	43.2
Turkey							
General		28.9	33.0	36.7	38.4		
Technical/vocational		30.4	31.5	38.6	38.9		
Teacher education		47.4	30.4	6.8	9.6		
Total NC		31.4	32.3	35.0	36.1		
United Kingdom[5]	(1964)		(1974)	(1979)			
Secondary	44.1	46.8	48.4	49.9	50.4		
Further education non-advanced FT	55.4	47.9	53.6	59.0	59.3		
Further education non-advanced PT[6]	18.2	19.1		20.6	22.7		
Total NC	33.9	36.4	40.6	41.5	44.8		
Yugoslavia							
General	53.4	55.8	52.8				
Teacher education	62.0	64.2	74.7				
Skilled worker training	20.8	28.1	29.6				
Other technical/vocational	52.8	54.6	52.3				
Common core			47.5				
Total NC	43.0	44.4	45.4				

NC = Non-compulsory.

1. French and German speaking systems only.
2. Commercial branches only.
3. Including technical education.
4. Courses of variable duration – a few weeks to 1 year or more – preparing for specific trades.
5. Pupils aged 16 to 18 although in 1971 compulsory schooling stopped at 15.
6. Day courses only and up to 1974 including a relatively small number of students in advanced further education.

Source: *Educational Trends in the 1970s, op. cit.* Completed with information provided by national authorities.

States, female participation rates continued to grow. In general, at the beginning of the decade enrolments of the 18 and 19 age groups were far lower than those of the 16 and even 17 year-olds, and marked differences remain. As discussed in greater detail in Chapter II, the differences in participation rates within the 16 to 19 age group vary considerably from country to country, depending on prevailing modes of attendance, e.g. part-time studies, and on the structure of their upper-secondary systems. Key factors are the modal age at which young people typically complete their secondary education and the organisation, size and length of technical/vocational studies.

These overall participation rates by age refer to the formal sector of education only; they would certainly be considerably higher if various out-of-school or non-formal types of training were included. (See Chapter II).

A crucial feature in the development of post-compulsory secondary education during the 1970s in most countries (Japan and Finland excepted) was the growing size of the cohorts typically enrolling at this level. Data provided in Table I.6 show that in some countries the size of the 16 to 19 age group continued to grow in the early 1980s whereas in others this period marked the beginning of a decline. This will affect the majority of OECD countries from around 1985 till the mid-1990s. By that time only in Japan and in Australia will the size of the 16 to 19 age group be larger than in 1970; it will be between 10 and 15 per cent smaller in the majority of countries and reduced by more than 25 per cent in Germany, as well as a few years later in Denmark and Finland. For the late 1990s, an upward trend is foreseen for quite a number of countries while a further decrease is expected in Denmark, Finland, Greece, Italy, Japan and Sweden.

A key question, then, is whether participation rates in formal education and training can, will or should increase to compensate for shrinking cohorts. From the above figures it is evident that the potential for growth remains high in most countries. However, more recent trends (slowdown in growth, in some cases stagnation or even decline) in the participation rates in formal education are indicative that it is by no means certain that new groups of young people and adults will choose to enrol in these types of schemes. Much will depend on the capacity and the political will in individual countries to set up new schemes and programmes

Table I.6. **Growth index of the 16 to 19 year old population**

	1970	1975	1980	1985	1990	1995	2000
Australia	100.0	110.8	120.4	124.5	119.1	113.2	122.1
Austria	100.0	118.8	136.9	118.1	94.5	92.8	101.9
Belgium	100.0	107.9	110.6	99.4	88.9	82.7	85.1
Canada	100.0	111.5	116.9	94.9	88.9	89.6	93.1
Denmark	100.0	99.2	102.2	102.3	97.8	82.3	73.0
Finland	100.0	86.8	89.2	81.0	70.2	75.2	73.5
France	100.0	101.6	102.8	98.6	98.6	90.6	95.5
Germany	100.0	112.3	131.5	118.1	78.8	72.3	78.1
Greece	100.0	106.2	109.1	118.2	105.5	108.6	115.0
Italy	100.0	103.1	115.7	116.2	109.5	94.1	81.2
Japan	100.0	86.2	87.9	100.3	109.2	91.0	79.5
Netherlands	100.0	105.1	114.0	111.3	92.6	79.9	80.1
New Zealand							
Norway	100.0	102.5	104.1	110.8	99.4	86.8	87.3
Sweden	100.0	95.7	102.0	102.4	99.3	86.1	84.1
United Kingdom	100.0	106.4	119.7	116.9	101.1	87.0	99.9
United States	100.0	111.3	112.0	95.8	86.2	89.6	98.6

Sources: SMEDEM and projections of SME.

appropriate to the diversity of needs and interests of a widened clientele. But over and above such educational policy supply measures, young people's decisions will be influenced by the incentives provided (e.g. direct and indirect financial aid to students in formal education in relation to other forms of aid to young people and above all by how the employment situation works out for older teenagers and young adults.

Trends in Youth Employment and Unemployment

The volume and growth of youth unemployment, its main features and consequences, and the ameliorating measures being adopted have been central to a series of recent OECD studies[11]. The deterioration in the employment opportunities for young people throughout the 1970s and the sharp rise of youth unemployment in recent years is shown in Table I.7. Although there are significant variations among countries, forecasts undertaken in 1983 estimated that in 1984 on average and for the twelve countries which were reviewed in the *OECD Employment Outlook*[12], one in every six members of the youth labour force could be expected to be unemployed.

Table I.7. **Youth unemployment rates for selected OECD countries**

Percentages

	1970	1973	1976	1977	1978	1979	1980	1981	1982	1983	1984
	Actual									Forecast	
Youth unemployment rates[1]											
United States	9.9	9.9	14.0	13.0	11.7	11.3	13.3	14.3	17.0	17.7	17
Japan	2.0	2.3	3.1	3.5	3.8	3.4	3.6	4.0	4.4	5.5	5.5
Germany[2]	0.4	1.0	5.2	5.4	4.8	3.7	4.2	7.0	10.3	13.5	14.7
France[3]	3.2	4.0	10.1	11.1	11.0	13.3	15.0	17.0	20.3	24	27.5
United Kingdom (July)[4]	2.9	3.2	11.8	13.5	12.7	11.3	15.1	19.6	21.4	23.5	23.5
Canada	10.2	9.6	12.7	14.4	14.5	13.0	13.2	13.3	18.7	22	21.5
Italy	10.2	12.6	14.5	23.9	24.8	25.6	25.2	27.4	29.8	32.7	34
Total of above countries						10.9	12.4	14.0	16.5	18.2	18
Australia[5]	2.3	3.3	9.8	12.2	12.6	12.2	12.3	10.8	12.9	20	21.7
Finland	3.2	4.7	8.5	14.9	16.6	12.8	10.0	10.9	11.6	13.7	13
Norway	..	5.6	5.7	5.0	5.9	6.6	5.4	5.8	8.2	11	11.2
Spain[6]	..	5.1	10.7	13.5	18.6	22.3	28.5	33.7	36.9	41.5	43.5
Sweden	2.9	5.2	3.7	4.4	5.5	5.0	5.1	6.3	7.6	9	9
Total of the twelve countries[7]						11.3	13.1	14.8	17.3	19.2	19.5
Youth unemployment levels (millions)											
Seven major countries						6.0	6.9	7.7	9.0	9.7	9.5
Twelve countries						7.0	8.1	9.1	10.6	11.5	11.5

1. Aged up to 24. Data refer to the total youth labour force in all countries except Canada and Australia where the armed forces are excluded from the labour force aged 15-24.
2. Unemployment figures refer to the registered unemployed at the end of September of each year. Labour force figures are annual averages based on various national sources including the microcensus.
3. Data refer to March of each year except 1982 when the data refer to April-May. Conscripts are included in the labour force aged 15-24.
4. Unemployment figures refer to the registered unemployed in July of each year and include school leavers. Labour force data are estimated from several sources including the EEC Labour Force Survey.
5. Data refer to August of each year.
6. Data refer to the last quarter of each year.
7. These countries accounted for about 85 per cent of the youth labour force in the OECD area in 1979.

Sources: For details on sources, refer to OECD, *Youth Unemployment: The Causes and Consequences* (Paris, 1980, p. 14). Averages and forecasts extracted from *OECD Employment Outlook*, Paris, 1983), p. 26.

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Even though, in the very recent years, there has been a levelling-off, and in some cases actual decline, in the ratio of youth to adult unemployment (see Table I.8), there is little reason for optimism. First, young people continue to share a major part of the burden of overall unemployment: in the twelve countries considered in the 1983 *Employment Outlook*, by 1984 the share of youth in total unemployment was expected to be just over 41 per cent[13]. Secondly, the levelling-off reflects rising adult jobless rates rather than falling youth unemployment rates. Thirdly, at least in some countries, e.g. the United States and Canada, where the youth population is declining, the narrowing gap is mainly the result of the changing demographic structure of the working age population.

Table I.8. **Ratio of youth to adult unemployment rates**

	1970	1973	1976	1979	1980	1981	1982
Australia	2.1	2.7	3.3	3.4	3.8	2.9	2.9
Canada	2.4	2.5	2.5	2.4	2.4	2.4	2.2
Finland	1.8	2.6	2.7	2.4	2.8	2.6	2.9
France	2.2	2.3	3.2	3.3	3.6	3.5	3.7
Germany	1.0	1.3	1.7	1.3	1.5	1.7	1.8
Italy	6.5	7.4	8.7	6.6	7.2	6.9	7.0
Japan	2.2	2.4	1.7	1.9	2.0	2.0	2.1
Norway		7.0	6.7	6.0	5.4	4.8	
Portugal		7.3[1]	3.6	4.5	4.4	3.6	
Spain	3.0	2.3	3.6	4.1	3.8	3.9	
Sweden	2.4	2.8	3.1	3.3	3.6	3.6	3.3
United Kingdom	1.5	1.4	3.1	3.0	3.1	2.5	2.4
United States	3.1	3.2	2.6	2.9	2.6	2.6	2.3
Seven major countries	3.1	3.3	2.9	3.1	2.9	2.8	2.6[2]

1. Data refer to 1974.
2. Secretariat estimates.

Source: National statistics and *Employment Outlook*, OECD, Paris, 1983, p. 88.

The nature of youth unemployment differs from that of adults in several distinct respects. On average young people have shorter spells of unemployment although, in most countries, long-term youth unemployment (for spells over 6 months and over 12 months) has been recently on the increase. Moreover, in interpreting the brevity of these spells, account must be taken of the higher propensity among young people than among adults to terminate spells of unemployment by withdrawing from the labour force[14]. Within the youth population there is a "hard core" or "high risk" group which is particularly likely to experience extended and/or multiple spells of unemployment. While the existence of this core group is linked to broader societal problems largely outside the scope of labour market policies, in periods of recession it tends to expand and its fate becomes worse.

In this sense, underprivileged young people are particularly vulnerable since they are less likely to be hired and will be the first to be fired. These generally include the economically and educationally disadvantaged, migrants, resident racial minorities, and in many cases, though not always visible, handicapped young people. Table I.9 on unemployed youth by level of educational attainment, which in many respects is quite an accurate proxy for social origin, shows the high concentration of youth unemployment among the most disadvantaged groups. It also shows how disadvantage is extending to include not merely the traditional early school

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leavers and also those who do not succeed in obtaining a qualification beyond compulsory schooling. While these figures reveal an increase in the unemployment rates among highly-qualified young people, and thus the extended nature of youth unemployment, they equally show that, in general, the longer the duration of formal studies the lower are the risks of unemployment.

Given the broad age range covered by youth, it is important to examine the incidence of unemployment among different age brackets and by sex. In most Member countri teenagers (15 to 19 group) experienced the greatest difficulties in finding jobs throughout the 1970s. Recently, however, their share in total unemployment in the twelve countries reviewed has declined: from 24.2 per cent in 1979 to 21.3 in 1982. By contrast, the share of young adults (20-24 group) in total unemployment rose slightly during the same period, from 23.2 per cent to 24.1 per cent[15]. In the light of current demographic trends – shrinking cohorts of teenagers and growing size of the 20 to 24 group – and as a result of specific measures introduced for the 16 to 18 year olds, it can be reasonably expected that in the coming years unemployment will hit hardest young people in their early twenties. In fact, these will be the same generations which had the "misfortune" of being born in the baby boom period and reached working age when job opportunities started to decline.

Available data show that the labour market experience of young women is not too different from that of young males, although there are considerable variations among countries[16]. Their labour force participation rates are lower as a rule, but not dramatically so. Female unemployment rates have been higher than those of males in the same age group in most, but certainly not in all, countries. Sharp gender differences in unemployment rates were found in France and Germany, where even the 20-24 year-old female fared substantially worse than male teenagers. Australia, Canada, Finland and the United Kingdom had lower jobless rates for females while gender differences were small in Japan, Sweden, United States and Norway. However, although the experience of females versus males is quite mixed for teenagers and adults, in different OECD countries the gender differences for adults are the same almost everywhere: adult women, with few exceptions, have higher unemployment rates than males, and with no exceptions, have lower labour force participation rates, and lower wages and earnings[17].

Significant qualitative differences also exist between adult and youth employment. Unquestionably, youth labour force participation, in particular of teenagers, can be characterised almost everywhere as being of a more "marginal" nature. In the first place, as already mentioned, it involves far greater turnover and mobility, e.g. shorter periods of employment alternating with unemployment and withdrawal from the labour force. Secondly, there is greater concentration of youth in "secondary" labour markets, in low-paid and low-level entry jobs. Thirdly, and of special significance in the context of this report, teenagers typically work shorter hours and, following a well established pattern in North America, they increasingly combine, and/or alternate between education and employment. This latter trend, together with the measures taken in many countries to encourage teenagers to undertake some form of education and training, complicates the interpretation of comparative data and trends on youth unemployment and comparisons between youth and adult unemployment. For example, when the teenage labour force participation rates decline, the increase in youth unemployment rates may be, at least in quantitative terms, less dramatic than the figures actually imply. The rise in youth unemployment rates is then often primarily the result of the declining proportion of the age group which is actually in employment and therefore does not mean necessarily that the numbers or the proportion of unemployed out of the whole age cohort has increased. By contrast, in countries where the labour force participation rates among teenagers are high (e.g. the United States where a substantial number of them

Table I.9. Level of educational qualification of unemployed young people

Percentages

	1970		1975		1976		1977		1978		1979		1980		1981		1982	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Germany									15-19 years									
Numbers (000) = 100			115.8		102.6		105.9		92.0		68.6		81.1		135.4		194.8	
Vocational training not completed			67.4		62.6		67.6		71.0		72.5		74.1		73.5		65.2	
of which:																	29.0	
Without diploma basic education					26.3		27.9		28.1		29.1		30.6		30.3			
With diploma basic education					27.1		26.4		28.0		28.2		28.3		26.7		25.4	
With higher diploma					7.4		11.6		13.1		12.8		12.6		12.9		7.9	
Qualification unknown					1.8		1.7		1.8		2.2		2.6		3.6		2.8	
Vocational training completed			32.6		37.4		32.5		29.0		27.5		25.8		26.5		34.8	
Australia									Unemployed aged 15-19 = 100									
Secondary school not completed											65.0		65.6		63.1			
Secondary school completed											17.0		14.6		15.9			
NU level											6.7		7.9		7.8			
U level											0.0		0.0		0.0			
Still in education											11.2		11.9		13.2			
Canada									Unemployment rate for 15-24 year-olds in labour force									
0-8 years of study			21.1		20.9		24.3		24.1		23.0		22.5		22.2		31.9	
Secondary[1]			12.9		13.6		15.3		15.4		13.7		14.1		14.2		20.0	
Some years post-secondary			9.3		9.6		11.6		11.5		9.4		9.4		10.1		14.6	
NU diploma			6.6		8.4		9.1		9.1		8.7		8.8		8.0		12.5	
U Degree			6.2		7.7		8.3		8.6		7.1		7.1		7.4		10.3	
Denmark									15-24 year-olds - Unemployment rate for young people not in education									
7th-8th year of study					19.6	31.2												
9th-10th year of study									17.5	24.3								
Diploma 1st cycle secondary									14.3	16.6								
Diploma 2nd cycle secondary									15.8	14.9								
Apprenticeship									9.7	11.6								
Vocational training completed									1.1	9.3								
United States									Unemployment rate for 16-24 year-olds, not in education									
Under 8 years of study	11.9	18.7	19.0	25.7	12.1	20.9	12.4	18.7	15.4	12.9	10.1	16.7	15.8	28.3	18.4	18.8		
8 years of study	15.4	14.8	20.9	31.3	26.8	34.3	16.6	33.6	21.4	19.8	22.7	27.6	26.5	31.7	24.3	32.0		
1 to 3 years secondary school	16.7	20.8	22.8	31.0	22.2	30.2	17.4	27.6	16.4	23.2	15.7	25.2	24.1	28.3	25.7	32.5		
4 years secondary school	9.7	10.1	13.6	13.6	11.3	13.0	8.9	12.2	7.1	10.4	8.0	11.8	13.5	11.4	13.5	14.2		
1 to 3 years higher education	8.7	7.0	10.1	10.9	8.0	11.8	8.0	7.3	5.1	6.1	5.8	7.1	9.9	7.9	8.1	9.0		
4 years or more higher education	8.2	5.1	9.8	7.0	6.3	7.9	5.9	9.7	6.7	6.0	5.3	4.7	6.4	5.4	6.9	4.1		

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	1970		1975		1976		1977		1978		1979		1980		1981		1982	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
United States	Percentage of unemployed and out-of-labour-force among secondary school leavers with or without high school diploma[2]																	
Unemployed																		
Diploma High School	11.3	16.2	17.5	15.1	15.3	15.0	13.0	13.8	10.2	12.8	12.9	15.6	17.1	15.1	16.9	19.0		
No diploma	22.4	7.6	28.3	14.5	21.9	16.1	20.0	15.9	19.2	18.3	15.0	19.4	22.2	17.5	21.5	24.6		
Out of labour force																		
Diploma High School	12.6	31.2	8.5	27.4	8.7	23.2	9.2	19.1	8.2	18.7	8.0	17.8	10.3	19.9	13.1	19.0		
No diploma	21.1	60.5	17.6	56.6	22.4	55.9	19.0	45.8	19.8	46.7	21.0	46.8	27.3	47.4	25.9	47.4		
France	Unemployment rate at exit from education system (apprentices included in labour force)																	
			(1973)															
No diploma			8	13			19	38			21	51						
Diploma 1st cycle secondary			5	15			19	38			28	45						
Diploma short vocational			6	10			17	26			14	45						
Diploma 2nd cycle secondary			9	10			15	22			27	37						
Diploma higher short NU			3	4			7	9			9	11						
Diploma higher long U			10	12			14	14			11	19						
Total			7	12			17	24			19	38						
Japan	Proportion of young people without employment[3] on exit from education system																	
1st cycle secondary	27.3		48.5		18.2		18.2	20.7	18.7	22.1	19.0	23.5	17.6	24.0	16.9	22.8	15.4	22.7
2nd cycle secondary	23.9		33.0		19.0		24.6	11.7	20.6	10.7	18.7	9.9	16.4	9.3	14.1	8.9	13.7	9.2
Technical colleges	0.9		4.5		6.5		5.8	2.5	4.5	5.2	3.4	4.2	2.5	4.9	1.9	6.4	1.4	1.9
Junior College	21.4		18.5		22.0		9.6	20.4	12.0	21.7	10.0	20.9	10.3	17.0	9.7	15.4	11.1	16.8
University 1st degree	8.7		10.4		12.3		7.9	23.8	8.1	24.3	7.9	23.6	6.7	20.5	6.8	19.9	7.4	21.5
University higher degree	15.1		14.5		20.1		15.3	38.0	15.2	37.8	13.8	38.5	13.2	37.2	13.4	34.5	14.3	43.8
United Kingdom	Percentage of new university graduates[4] assumed to be unemployed																	
1st degree	9.2	7.4	6.1	6.1	5.8	5.4	4.7	4.7	4.8	5.0	8.8	7.8	11.2	9.5	13.3	11.3		
Higher degree	1.7	4.2	1.7	3.1	1.8	3.4	1.2	2.2	1.4	2.4	1.7	3.2	1.9	2.6	2.5	3.8		
Great Britain	Educational qualifications of new entrants to the Youth Opportunities Programme[5] for young unemployed aged 16-18 years																	
No qualification									49		45		35					
CSE (below grade 1)									25		30		35					
Other qualifications									26		25		30					
Total (000) = 100									162.0		216.0		360.0					

NU: Non-University U: University.

1. Persons having completed a few years of secondary education or the total of it but with no higher education.
2. Situation in October of a given year of high school graduates and drop-outs of the preceding year. Not including persons simultaneously in education and the labour force.
3. Unemployed and out of labour force.
4. Whose destination is known.
5. Training and work experience scheme.

Source: *Educational Trends in the 1970s, op. cit.* Completed with information from national authorities.

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combine education and work, even if only for a few hours per week) unemployment figures may in fact conceal a different reality. In order to have a clearer picture it would also be important to know whether the "new groups" who benefit from increased education and training opportunities are drawn primarily from the ranks of the employed or the unemployed.

Thus, while there is need for further clarification and refinement of indicators of youth unemployment and labour participation rates, it is clear that in the years to come young people will continue to experience serious difficulties in entering working life. Larger numbers will enter employment well beyond their twenties and there will still be unacceptably large numbers of jobless youth. It is within this gloomy context that education and training systems will have to operate in helping mitigate the consequences of such a potentially disruptive social phenomenon.

A crucial challenge to education and training policy-makers will be to develop schemes which are not merely alternatives to unemployment but have a foward-looking perspective. This will require improved systems of information and more efficient use of them by all those involved in education as well as mechanisms to encourage participation of this sector in debates concerning changes in the organisation of work and the introduction of new technologies. Indeed the use of technology that will be made in the future may well depend on the type and level of education of the new entrants into the labour force.

Youth Attitudes towards Education and Work

Extended schooling, the prolongation of the period of initial education and training well into young adulthood, together with the declining opportunities for youth in the labour market and the climate of uncertainty that surrounds their future occupational role, have all had their impact on the attitudes and expectations of young people. Since educational policy decisions in the majority of OECD countries continue to be largely guided by individual demand, it seems imperative that the aspirations of young people, their expressed needs and interests be seriously taken into account in the formulation of such policies in the future.

The brief reference made here to current views of young people draws heavily on an OECD study which elucidates the results of national and comparative youth surveys undertaken during the late 1970s[18]. What we have now to say should be treated with caution in view of the diversity of the information available, the wide differences among countries and the rapidly changing social context within which youth attitudes are described. Nonetheless, together with another recent OECD comparative study[19] they enable some interesting insights on the views held by young people which are often in contrast with stereotyped interpretations held by the public at large.

The majority of young people say they attach high value to *education*, they want to learn, and view schooling as extremely important for their future, in particular in terms of shaping their occupational careers. However, when asked about their individual school experience, a relatively high proportion express dissatisfaction and frustration with what actually happens there. According to an IEA study (International Association for the Evaluation of Educational Achievement) negative attitudes towards school are strongest among young people from the industrialised countries and, significantly, they increase with age and level of education[20].

A general and strongly voiced criticism is that schools have become primarily sorting and screening agencies. Many young people see schools as being uniquely concerned with the selection of pupils for the next level of education. In particular, they feel rejected by teachers who focus their attention on those with academic-type talents and skills.

While pupils are extremely critical of the isolation of schools from "real life" and condemn them for neglecting those aspects related to the world of work, they also disapprove of the increasing orientation of schools as allocation and sorting agencies for occupational positions. Yet a growing number of young people, whether they like or dislike schools, adjust their behaviour to this situation. Among those with negative attitudes a high proportion nevertheless continue to upper-secondary education – in principle on a "voluntary" basis but in practice unwillingly. Their choices are increasingly guided by strategies of optimisation rather than by their own preferences; that is, they select those programmes most likely to ensure access to further education or to jobs perceived as having immediate or higher employment value. As a consequence, their dislike of and frustration with their school experience tends to be enhanced.

Evidence that a significant number of young people continue their education under duress goes well beyond verbal statements. In a number of countries, there are growing claims that secondary students are under too much stress, given the highly competitive nature of many programmes. In others, such forms of behaviour as truancy, apathy, violence, are at least partially seen as related to discontent and frustration with the schooling experience. Negative attitudes intensify when young people are urged to go on learning for longer periods with less and less certainty about their job prospects, so the gap grows between the aspirations inculcated in youth and what they are likely to achieve in terms of jobs, remuneration and status.

With regard to *work*, the attitudes of young people, as could be expected, are mixed and diverse. But at least one message came through clearly: young people today do not reject the work ethic. On the contrary, the majority view work as a normal and necessary part of adulthood and many would much prefer it to continued education/training or unemployment benefits. A majority of them say they want to work, not only for the money, but also to extend their social networks, be integrated in society and in particular be seen to have a useful role in their community. They place emphasis on self-fulfilment, security and the development of rewarding leisure interests while rejecting the strongly individualistic and competitive nature of current work and career patterns.

There is, however, a significant minority of young people whose attitude to work is less positive. This includes a wide range of groups from varied social milieus who adopt quite different responses and behaviours. Many seek a solution through self-exclusion from mainstream society norms and values. This may be mildly expressed through apathy, indifference and cynicism vis-à-vis jobs that are held or available, or more manifest – in particular among middle-class youth – through membership of marginal groups adopting different work styles or through participation in religious sects. Others see an escape in drugs and alcohol; and an extreme form of isolation, perhaps less frequent now than in the 1970s, is found among those joining radical groups or who actively engage in terrorist activities.

The data also show that the attitudes to work of the majority of young people do not differ dramatically from those of adults. They do not confirm the commonly-held view of employers that young people are restless, that they easily abandon jobs and have unrealistically high demands for the quality of working life. It seems that most of them are ready to accept and even be reasonably satisfied with whatever job opportunities they get[21]. Their reaction to today's scene reveals realism rather than illusion[22].

The results of these surveys, with all the reservations as to their validity, should be a matter of strong concern for educational policy-makers since they clearly reveal a quite profound and generalised discontent among youth with their educational experience. Even if these views emanate substantially from among "low achievers" and those who feel rejected by the education system, this does in no way diminish the seriousness of the claims and the urgent

need to provide adequate responses. These are likely to be quite various, depending on the type of group considered and the programmes young people attend.

The focus of discontent is usually on the visible characteristics of schools, such as their organisation, teaching process, teacher attitudes or curricula. However, public authorities cannot consider these in isolation of the influence of other circumstances outside the classroom. We have in mind particularly the prolonged isolation of young people from the adult world, the lack of opportunities to assume responsibilities associated with adulthood, their prolonged dependence due to lack of their own financial resources, and so on. Negative attitudes to schooling may also be the result of young people "projecting" on one setting a more general discontent with their lives, their families, their social relations or of an understandable anxiety about their future life and career prospects. As much as there is need for profound reforms in schools, it is at least questionable whether new policies for education and training can or should respond to problems that lie outside their proper scope.

From this follows the need for close coordination among all sectors of public policy dealing with youth problems and agreement about how responsibilities can most appropriately be shared. In the search for such policy rationalisation, consensus on what the broad objectives should be seems essential.

Objectives of Policies for Post-compulsory Education and Training

For policies specifically relevant to young people coming out of compulsory school – 16 to 19 year-olds – the following broad objectives seem to be common to most countries:

i) to avoid marginalisation (and, even more, the feeling of being marginalised) among large segments of the youth population;

ii) to encourage the participation of young people in education and training of all types that represent better or more realistic alternatives to subsidised employment, temporary work, unemployment benefits;

iii) to expand education and training provision so that it responds to the variety of needs, interests and abilities of young people, with special concern for maintaining the quality of the services provided. Standards must be defined and assessed in such a way that they take due account of the diversity of the purposes of the various programmes;

iv) to facilitate better knowledge of the world of work and the acquisition of work experience – considered a necessary component of the education and personal development of young people;

v) to monitor the development of post-compulsory education so that pressures to ensure a more efficient use of resources can be reconciled with the long-standing commitment to greater equity and social justice;

vi) particularly to help the more vulnerable groups in finding appropriate education or training opportunities and in completing their programmes successfully;

vii) to pay constant attention to the training, recruitment and career prospects of teaching staff, as an essential requirement in pursuing these aims.

Within this common horizon, Member countries advocate quite different approaches to the development of post-compulsory education and training provision. We examine these in the following chapter.

NOTES AND REFERENCES

1. *Education and Work: The Views of the Young*, OECD/CERI, Paris, 1983.
2. Carnegie Commission, *Giving Youth a Better Chance*, Jossey Bass, San Francisco, 1979.
3. *Ibidem*, p.15.
4. For a discussion on different interpretations of the concept of a youth guarantee see: "Towards a Guarantee of Youth Opportunities", OECD/CERI, 1984 (document).
5. *Youth Unemployment; The Causes and Consequences*, OECD, Paris, 1980.
   Youth Without Work: Three Countries Approach the Problem, OECD, Paris, 1981.
   New Policies for the Young, OECD (forthcoming).
   "Towards a Guarantee of Youth Opportunities", OECD/CERI, Paris, 1984 (document).
6. *Education and Work: The Views of the Young*, OECD/CERI, Paris, 1983.
7. *The Future of Vocational Education and Training*, OECD, Paris, 1983.
8. See in particular: Committee of Ministers of Member States. Recommendation No.R (83)13 on the Role of Secondary Schools in Preparing Young People for Life. Also: *Living Tomorrow: An Enquiry into the Preparation of Young People for Working Life in Europe*, Council of Europe, Strasbourg, 1981.
9. Definitions of the terms "formal", "non formal" and "informal" education have been proposed by F. Coombs and M. Ahmed in *Attacking Rural Poverty: How Non Formal Education Can Help*; Johns Hopkins University Press, 1979. In a recent article by T. La Belle: "Formal, Non Formal and Informal Education: A Holistic Perspective of Lifelong Learning", in *International Review of Education*, vol. 28, No.2, 1982, these definitions are presented with some useful comments:

   "... informal education is the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment; non formal education is any organised, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children. A major difference between these two processes rests with the deliberate instructional and programmatic emphases present in non formal education but absent in informal education. The third or formal mode of learning is defined by the authors as the institutionalised, chronologically graded and hierarchically structured educational system, spanning lower primary school and the upper reaches of the university. Because schools are typically sanctioned by the state, while non formal education need not be so sanctioned (e.g. religious instruction, job training), a major difference between formal and non formal education often rests with the influence of the government on the sponsorship of the two types of educational programs."
10. *Educational Trends in the 1970s: A Quantitative Analysis*, OECD, Paris, 1984. The following countries were included: Australia, Austria, Canada, Denmark, Finland, France, Greece, Italy, Japan, the Netherlands, Spain, Sweden, the United Kingdom, the United States and Yugoslavia. Whenever available, recent data for other countries have also been included.
11. The data and analysis of trends included in this section were mainly drawn from: *OECD Employment Outlook*, OECD Paris, 1984; and *New Policies for the Young*, OECD (forthcoming).

12. The twelve countries surveyed in the *OECD Employment Outlook* were: Australia, Canada, Finland, France, Germany, Italy, Japan, Norway, Spain, Sweden, the United Kingdom and the United States.
13. *OECD Employment Outlook*, September 1983, p.27.
14. *Ibidem*, p.80.
15. *Ibidem*, p. 29, note 3.
16. *New Policies for the Young, op. cit.*
17. *Ibidem.*
18. *Education and Work: The Views of the Young, op. cit.*, 1983.
19. J. Coleman and T. Husén, *Becoming Adult in a Changing Society*, OECD/CERI Paris, 1985.
20. T. Husén, *The School in Question*, Oxford University Press, Oxford, 1979.
21. *Education and Work: The Views of the Young, op. cit.*
22. *Ibidem*, p.26-30.

Chapter II

PATTERNS OF PROVISION

A recent British report characterised the vast and diverse range of courses and qualifications for the 16-19 year-olds provided in the United Kingdom as a jungle[1]. The term is not used to criticise diversity of provision; it rather points to the need for policy measures to enable public authorities, employers and in particular young people to have a clearer overall picture of the array of options provided as a basis for informed choices and decisions. Systems in other countries are perhaps less heterogeneous, but they too are highly complex, diffuse and difficult to comprehend within a single framework.

The historical development of education and training schemes for the 16 to 19 year-olds accounts for some of the problems currently being faced. In most countries opportunities for this age group have been traditionally more varied and scattered than at other levels, usually offered in diverse settings, under different public administrations and with strong involvement of enterprises and the private sector. Thus, in many countries a major challenge in the coming years will be opening up "the jungle of post-compulsory provision" – that is, developing the richness of its diversity and enhancing its distinctive characteristics while at the same time rendering the various paths more visible and providing clear signposts to access opportunities, cross roads, distances and destinations.

It is obviously impossible here to discuss in any detailed way the structure of provision in individual Member countries. Instead, we will start by examining a limited number of clearly distinct organisational patterns, taking as examples those countries where they exist in a reasonably developed form. From there we will look at current coverage of post-compulsory education and training systems in a wider range of countries, discuss some of the main issues related to the future development and organisation of the provision.

In the majority of Member countries one can identify at least three different settings offering education and training for the 16 to 19 year-olds. The boundaries between them are less clear now than they were some decades ago, but they still remain separate with their own patterns of control and organisational arrangements, distinct objectives, teaching styles and ethos.

The first type of setting – the *school* sector – encompasses all schools and colleges catering for this age group, whether public or private. It provides a wide range of courses (general, technical and vocational) articulated as a middle level between compulsory and higher education. It is most often under the control and accreditation of the education authorities. The second setting, considered in some countries as part of the formal system, embraces all forms of *apprenticeship* offering initial vocational training leading to recognised qualifications. It usually provides highly structured programmes of one to four years' duration and typically involves a combination of part-time enterprise training and part-time school or college education under the shared control of its respective sponsors: employers and education authorities.

The third type of setting, less clearly identifiable, encompasses a variety of *out-of-school* schemes usually characterised as *non-formal*, as distinct from the more established schooling and apprenticeship systems which award nationally recognised qualifications. Whereas in the past "on-the-job" training within enterprises represented the bulk of non-formal initial training provision, in recent years there has been a rapid development of a wide range of programmes of vocational training for this age group organised by different public administrations, primarily by Labour Ministries. The most striking development – and one on which this report focuses particular attention – has been the programmes launched in the framework of youth employment policies, primarily conceived as *alternatives* to initial formal education or to unemployment. A key role currently assigned to these schemes is that of providing young people left aside by the formal system with opportunities for acquiring skills and competences to facilitate their transition to work. The majority of these new schemes were conceived as cyclical or temporary but there is a widespread feeling today that they will become a permanent component of post-compulsory provision, a development likely to entail some major organisational changes at this level.

MAIN PATTERNS OF PROVISION

Taking as the main criterion the different role and weight assigned by Member countries to each of these settings in terms of *overall participation rates* and the *responsibility each of them is assigned for vocational education and training*, three different approaches or models of provision at the post-compulsory level can be identified: the "schooling" model, the "dual" model and the "mixed" model. As is made clear throughout the analysis in this chapter, these models are "ideal" in the sense that no country organises all its education and training within a single setting. Moreover, since the purpose of this classification is to help highlight distinctive features of current systems that account for the diversity in trends and policies being pursued, these models are to be considered as points of departure for the analysis and not as targets that countries are seeking to attain.

The main characteristic of the *schooling model* is that it aims at integrating most, if not all, forms of provision after compulsory schooling within the formal education system, favouring schooling on a full-time basis for the majority of the age group. This pattern was adopted by countries that pioneered the development of mass full secondary education, namely the United States and Canada, which by now enrol respectively 87 per cent and 72 per cent of the 17 year-olds in the formal education system[2]. At present, it finds its fullest expression in Japan where 94 per cent of the relevant age group attend upper-secondary schools. In all these countries the majority of secondary school students enrol on a full-time basis.

During the post-World War II period, the full-time schooling pattern of development was also favoured in most of Western Europe. Thus, as seen in Table II.1, in the majority of the European countries the formal schooling system is the dominant sector at this level[3]. Important variations, however, exist. Belgium and Sweden stand closest to the "ideal" type of the schooling model because, in addition to their high participation rates, their education systems have a virtual monopoly of education and training at the post-compulsory secondary level. Among the other countries with high overall participation rates at this level, the Netherlands, Finland, Denmark and to a lesser extent France have clearly given priority to expansion through the school sector; in all of them schools currently enrol more than two-thirds of the 17 year-old cohort. Moreover, in spite of the fact that, as shown in Table II.1,

Table II.1. Participation rates of 17 year olds in education and training; in employment and unemployment*

	Education and training						Other			Total education and training			Employment			Unemployment		
	Schools**			Apprenticeship														
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Austria (1981)			39			45						84						
Australia (1981)[1]	37	40	39				29	12		66	53	60						
Belgium (1982)[2]	74	78	75									75	20	12	16	7	9	8
Canada (1981)			72															
Denmark (1980)[3]	59	80	71	23	3	12				82	80	81			23			10
Finland (1978)[4]				74		2						76	31	25	28	19	15	17
France (1981)	53	67	60	17	5	11				70	72	71						
Germany (1981)[5]	36	41	39	58	45	52				94	86	90						
Ireland (1979)	43	60	51															
Italy (1981)[6]	55	40	47	28	17	23				83	57	70						
Japan (1982)	93	95	94				3	2	2	96	97	96	3	2		6	6	6
Netherlands (1981)[7]	73	69	71	12	9	11				85	78	82	19	15	17			
New Zealand (1982)			47															
Norway (1981)	69	75	72															
Portugal (1977)			35															
Spain (1980)	49	47	50															
Sweden (1981)	78	79	78															
Switzerland (1982)	23	32	28	84	40	52				87	72	80						
United Kingdom (1981)[8]	30	30	30	15	3	9	20	25	22	65	58	61	28	35	31	18	16	17
United States (1981)	87	87	87							87	87	87						

* Figures for some countries add up to more than 100 per cent since young people who are employed or unemployed may be enrolled in part-time studies.
** Full-time and part-time participation rates including higher education institutions.

1. Australia: Under "other" are included part-time students in TAFE institutions.
2. Belgium: Standing Conference of European Ministers of Education. National Summary, *mimeo*, 1983.
3. Denmark: Data provided by Ministry of Education. Figures refer to destination of young people after completion of compulsory schooling. The majority of young people enter upper secondary education when they are 17 years old.
4. Finland: Standing Conference of European Ministers of Education. National Summary, *mimeo*, 1983. Data on participation rates in employment and unemployment come from a manpower survey done in 1981.
5. Germany: "Student Flows in Four OECD Countries", Paris, 1985 (document for general distribution).
6. Italy: *"Student Flows in Four OECD Countries", op. cit.* Regional training centres have been included under schools. Participation rates in these institutes were: 7 per cent of boys; 4 per cent of girls; 5 per cent of total.
7. Netherlands: Standing Conference of European Ministers of Education. National Summary, *mimeo*, 1983.
8. United Kingdom: DES Statistical Bulletin. February 1983. *Schools* include full-time education in schools and F.E. colleges; *apprenticeship* includes enrolment in part-time day release courses. *Other* includes Y.O.P. (Youth Opportunities Programmes) other day part-time studies and evening studies; *Employment*: those employed with *no day study*.

Sources: Unless otherwise stated: *Educational Trends in the 1970s, op. cit.* Completed with information provided by national authorities.

the role of schools in these countries is less exclusive than in some others, all of them have recently issued policy statements in favour of widening further the scope of the school system, in particular for the 16 and 17 year-olds. The higher school participation rates of female students in most of these countries merits special attention and its implications for provision at this level will be discussed later.

While these countries share many problems as a result of the dominant position of the formal education system in total provision for the 16 to 19 year-olds, it is clear that underlying the "schooling approach" there is a wide range of policies and practices, and these we will review in Chapter III. It is important, however, to point from the outset to certain key differences between the North American and Japanese formal modes of provision on the one hand, and the European schooling model on the other. Table II.2, on participation rates by age and level of education, and Table II.4, on the distribution of students between general and technical/vocational education, highlight some of these differences.

The presence of an older student body, together with the higher proportion of the age group enrolled in technical vocational education in upper-secondary systems of Western Europe, suggest that these fulfil functions which in the United States, Japan and certain Canadian provinces are more widely shared between the secondary and post-secondary levels of education. These differences are reinforced by the wide range of post-secondary Community Colleges in North America and Junior Colleges in Japan, catering for a significant proportion of the 18-19 year-olds and providing general and technical programmes which in some respects are similar, if not equivalent, to those of European upper-secondary schools.

Finally, it is significant to note that the schooling model is also dominant in countries with lower participation rates, such as Turkey, Portugal, Spain and Greece.

The *dual model*[4], characterised by the presence of a strong and highly developed apprenticeship sector, is typically found in Germany, Switzerland and Austria. These are the only OECD countries where the proportion of 17 year-olds enrolled in apprenticeship schemes exceeds that attending schools on a full-time basis (Table II.1). Moreover, since at the same time these countries have part-time compulsory education up to the age of 18, overall participation rates for the 16 to 19 age group in countries with the dual model are among the highest in the OECD area (Tables II.1 and II.2).

Other countries where apprenticeship constitutes a much smaller, although significant sector, in particular for young men, are Australia, Denmark, France, Italy, the Netherlands and Norway. As shown in Table II.1, their overall structure of provision differs considerably from that of the typical dual systems. Less easy to show but nonetheless important, particularly at a time when the "dual model" is attracting considerable attention internationally, are the variations among schemes listed under the umbrella term of apprenticeship. In the first place, there are hierarchical and/or qualitative distinctions (more often informal than formal) among schemes within individual countries; secondly, it is clear that the quality, professional status and employment value of apprenticeship qualifications vary from country to country. Such variations derive from their respective organisational features but also, and perhaps more fundamentally, from the historical development and the social ranking of vocational training and technical practical jobs in each national setting. The weight of these historical and sociological factors largely explains the greater difficulties faced by most Southern European countries in developing a strong vocational sector, in particular in raising its relatively low prestige and attraction. It also points to the problems and risks involved in transplanting to other countries an organisational model such as the German-type apprenticeship system that is so closely linked to a particular social context and rooted in a centuries-old tradition.

Table II.2. **Enrolment rates of 18 and 19 year olds by level of education**

Full-time (FT) and Part-time (PT)

		18 Years			19 Years		
		Secondary education	Higher education	Total	Secondary education	Higher education	Total
Austria (1981)		71.4	5.1	76.5	36.7	8.9	45.6
Australia (1981)	M	42.4	10.2	52.6	32.2	13.4	45.7
	F	21.6	10.8	32.4	15.1	13.9	29.0
Belgium (1981)[1]		79.7	20.3	100	53.3	46.7	100
Canada (1981)		22.9	19.2	42.1	5.6	24.4	30.0
France (1981)[2]		31.5	13.7	45.2	10.3	19.7	30.0
Finland (1978)		58.5	0.3	58.8	29.4	5.1	34.5
Germany (1981)	M	75.7	0.4	76.1	45.1	2.6	47.7
	F	66.9	0.2	67.1	38.4	5.1	43.5
Ireland (1979) FT only		13.6	12.5	26.1	1.9	14.2	16.1
Netherlands (1982)	M	60.9	7.8	68.7	36.9	14.8	51.7
	F	49.3	7.7	57.0	23.7	12.4	36.1
New Zealand (1982)[3]		8.9	23.6	32.5	4.3	26.6	30.9
Norway (1981)		56.0	0.6	56.6	24.1	5.5	29.6
Portugal (1977)		28.9	5.7	34.5	19.4	8.4	27.8
Spain (1979)	M	22.9	11.1	34.0	11.3	14.7	26.0
	F	22.5	10.9	33.4	11.4	13.9	25.3
Sweden (1978)		35.0	0.8	35.8	10.9	4.4	15.3
Switzerland (1982)		70.0	0.9	70.9	47.4	3.9	51.3
United Kingdom (1979)	M	34.7	9.3	44.0	20.3	12.4	32.8
	F	22.2	8.1	30.4	15.0	10.1	25.0
United States (1981)	M	22.2	35.1	57.4	5.1	37.6	42.7
	F	14.2	39.8	53.9	3.3	37.5	40.8

1. French and German speaking systems only. Figures refer to distribution of students and are not participation rates.
2. Figures under Higher education do not include some specialised commercial schools, health schools, etc.
3. Figures under Higher education include Technical Institutes and Teachers Training Colleges.

Source: *Educational Trends in the 1970s, op. cit.* Completed with information provided by national authorities.

The *mixed model*, characterised by the greater importance assigned to the non-formal sector, is more commonly found in countries where schools represent the dominant form of provision and where the potential for growth at the post-compulsory level is still relatively high. Its development is based on the viewpoint that the formal system, and in particular the school sector, cannot or should not attempt to monopolise expansion, especially when needs are seen in terms of vocational training and education/work related schemes. Policies aimed at the development of such a model support some increase in participation within the established systems – whether schools or apprenticeship – but essentially favour the development of separate initial training schemes outside schools or clearly distinct from programmes provided within the formal sector. At present this "mixed" approach is notably being pursued in the United Kingdom, where a special agency, the Manpower Services Commission under the Department of Employment, has been assigned the responsibility and the resources to provide training facilities for the 40 per cent of the age group not catered for by existing schools and colleges[5]. Training schemes as currently conceived represent an alternative to the existing network of formal provision and thus in some respects represent a competitive sector organised largely outside the power or control of education authorities. Schools, colleges and the education administration can, and do, participate effectively in these schemes but in most cases as partners providing services on a contractual basis.

Other countries, in particular France, faced with similar problems of growing youth unemployment and under strong pressure to open up suitable training opportunities for new groups, show increased interest in different versions of the mixed or pluralistic approach. One claim is that such an approach fosters greater diversity and flexibility of provision, and introduces a moderate degree of competition – at least when these demand-led and more market-oriented schemes are adapted to the needs of specific groups in local communities, and are allowed to operate within the limits set by government policy.

Given the recent and experimental nature of many of these programmes, it is difficult to generalise about their merits and achievements. But the potential these schemes represent for the future cannot be ignored. As they become more permanent and established – as is likely to be the case – a key question is whether they will be able to maintain a type of distinctiveness which in many respects is related to their short existence and less formal character. In the long run one possibility is that emphasis on a type of training that is broader in nature and leads to recognised qualifications will bring these training programmes closer to the educational establishment and consequently lead them to adopt many of the formal features of the schooling model – notwithstanding the possibility that in the process they may bring some changes in schools. Another possibility is that under strict policy guidelines they will continue to develop as a parallel or alternative sector, with closer resemblance to the dual approach. In the light of present policies – of which the United Kingdom is the clearest but by no means the only example – of preserving clearly established boundaries between schools and the new training initiatives, the mixed approach bears stronger similarities to the dual models of provision with which, as shown, it shares a number of common problems.

THE COVERAGE OF INITIAL EDUCATION AND TRAINING SYSTEMS

Participation Rates by Age

Table II.3 shows participation rates in education and training at the secondary and post-secondary levels by single year of age illustrating at the same time the need for and the value of disaggregated data as a basis for any diagnosis or policy statement concerning overall provision for the 16-19 age group. Everywhere there are wide differences in participation rates within this group; in all the countries considered, with the exception of Spain, more than two-thirds of 16 year-olds are in some form of education and training, in seven countries the proportion is between 80 per cent and 90 per cent, and in four countries above 90 per cent. On the other hand, no OECD country has more than 50 per cent of the 19-year cohort in formal education and training (including all levels); the typical rate of attendance of this age group in the more advanced countries is between 30 per cent and 50 per cent. When only full-time school enrolments are taken into account (Table II.3 *bis*) participation rates are of course far lower; in general, differences are greater among the older groups but they are especially pronounced in countries with the dual model where the bulk of the 16 to 19 age group attend schools on a part-time basis.

Evidence that in recent years expansion has focused primarily on the younger groups – 16 and 17 – is confirmed by the fact that, at present, the sharpest drop in enrolment ratios tends to be between the 17 and the 18 year-old groups. Exceptions are the United Kingdom, Australia and New Zealand, where the sharpest decline in participation rates is still between 16 and 17. As shown in Table II.3, eighteen countries surveyed have around 70 per cent or

Table II.3. **Enrolment rates of 16 to 19 year olds by single year of age for the last year available**
Full-time (FT) and Part-time(PT)*

	16 years			17 years			18 years			19 years		
	M	F	T	M	F	T	M	F	T	M	F	T
Australia (81)	78.8	75.7	77.3	65.7	52.6	59.2	52.6	32.4	42.0	45.7	29.0	37.4
Austria (81)	89.2	86.1	87.1	89.8	77.4	83.7	86.7	70.1	76.5	62.8	41.2	45.6
Belgium (82)[1]	87	86	86.5	74	78	75	56	58	57	41	44	43
Canada (81)			88.6			71.6			42.1		30.0	
Denmark (80)			86			68			61			50
Finland (78)	86.8	88.2	87.5	73.1	77.8	75.4	53.4	64.5	58.8	27.4	41.4	34.5
France (81)	82.8	85.0	83.9	65.5	72.3	68.9			45.2			30.0
Germany (81)	92.4	91.7	92.1	91.7	86.8	89.3	75.4	66.9	71.5	45.1	38.4	41.8
Italy (81)[2]	79.1	58.6	69.1	83.2	56.7	70.3	64.8	37.3	51.3	39.1	19.3	29.4
Japan (80)[3]	93	95	94	93	95	94						
Netherlands (82)	98.3	97.3	97.8	87.3	82.1	84.7	68.7	57.0	62.8	51.7	36.1	43.9
New Zealand (82)			74.4			46.5			32.6			31.2
Portugal (77)			39.2			35.0			34.5			27.8
Spain (80)	53.1	53.7	53.4	49.2	50.9	50.1	36.4	37.7	37.1	27.3	27.7	27.5
Sweden (80)[4]	87.0	87.8	87.4	77.7	79.0	78.4	43.4	46.3	44.7	21.6	25.7	23.5
Switzerland (83)	91.1	80.4	85.9	89.0	73.8	81.6	82.6	63.1	73.1	62.9	42.3	52.8
United Kingdom (81)	64.3	72.0	68.0	53.5	52.0	52.8	43.5	30.2	37.0	32.4[5]	24.3[5]	28.5[5]
United States (82)	95.0	93.6	94.3	87.9	86.2	87.1	56.6	52.9	54.7	41.1	41.6	40.9

* Including apprenticeship, but not in Italy.

1. Source: Standing Conference of European Ministers of Education. National Summary 1983 (mimeo).
2. Higher education not included; but including regional vocational training. *"Student Flows in Four OECD Countries"*, *op. cit.*
3. Statistics from the Ministry of Education. Figures refer to the proportion of young people completing lower secondary education (approximately 99 per cent of the cohort) who continue at the upper secondary level. Participation rates for 17 year-olds are similar to those of the 16 year group given the very low drop-out ratio in Japan.
4. Including the different types of adult education.
5. 19 and 20 year-olds.

Source: Except where otherwise stated, *Educational Trends in the 1970s*, *op. cit.* The age refers to the beginning of the academic year. Completed with information provided by national authorities.

more of their 17 year-olds in initial education or training (six countries above 80 per cent), whereas the corresponding ratios for the 18 year-olds are typically between 40 per cent and 60 per cent. The drop is sharpest where the schooling pattern prevails; in the non-European countries it corresponds to the break between secondary and post-secondary education since young people typically complete their secondary education when they are 17.

In Europe, this drop in enrolment ratios between 17 and 18 reflects the past increase and current weight of short-cycle school-based vocational studies generally completed by the age of 17. The fact that young people attain legal majority at 18 is also a significant factor. Not only do they have more, even though declining, possibilities and incentives to move out of schools (military service, employment, etc.) but they are also under less government pressure to remain in formal education when they come of age. Indeed, 18 years is the age limit set by many youth guarantee or similar schemes involving public responsibility for young people where the emphasis is primarily on education and training. The example of Sweden is significant in this context: public responsibility for the 16-17 year-olds is assigned to education authorities whereas for the 18-19 year-olds it is assumed by the labour authorities.

In countries with strong dual systems (Austria, Germany, Switzerland), the situation is somewhat different and merits special consideration. In terms of overall coverage, all three countries have high participation rates for the 16-17 year-olds and the highest in the OECD

Table II.3 *bis*. **Full-time enrolment rates of 16 to 19 year olds by single year of age for the last year available**

Full-time

	16 years			17 years			18 years			19 years		
	M	F	T	M	F	T	M	F	T	M	F	T
Australia (81)	58.6	63.8	61.2	36.7	40.4	39.0	18.9	18.8	18.9	15.9	16.7	16.3
Austria (81)			58.8			39.1			32.6			22.1
Belgium (82)[1]	87	86	86	74	78	75	56	58	57	41	44	43
Canada (81)			88.6			71.6			42.1			30.0
Finland (78)	86.8	88.2	87.5	73.5	77.8	75.4	53.4	64.5	58.8	23.5	33.5	29.4
France (81)	66.8	80.1	73.3	52.7	67.2	60			42.2			29.4
Germany (81)	52.7	62.2	57.3	34.7	43.5	38.9	26.5	32.7	29.6	18.4	24.2	21.3
Italy (81)[2]	61.2	47.4	54.5	55.3	39.5	47.4	45.4	26.6	36.2	25.1	11.6	18.5
Japan (80)[3]	93	95	94	93	95	94						
Netherlands (82)	92.9	91.0	92.0	76.1	73.4	74.8	58.3	48.5	53.4	40.8	28.4	34.6
New Zealand (82)			70.2			37.1			18.0			14.3
Spain (80)	53.1	53.7	53.4	49.2	50.9	50.1	36.4	37.7	37.1	27.3	27.7	27.5
Sweden (80)[4]	86.4	87.2	86.7	76.0		76.7	39.5	41.1	40.3	17.2	16.7	16.9
Switzerland (82)	44.9	51.8	48.4	23.6	31.6	27.4	19.3	25.2	22.2	17.8	19.1	18.5
United Kingdom (81)	43.1	53.8	48.3	27.3	33.1	30.2	17.1	15.8	16.5	14.7[5]	12.0[5]	13.4[5]
United States (82)	95.0	93.6	94.3	87.3	85.8	86.6	53.7	48.9	51.2	38.8	35.9	37.3

1. Source: Standing Conference of European Ministers of Education. National Summary 1983 (mimeo).
2. Higher education not included; but including regional vocational training. *Student Flows in Four OECD Countries*, op. cit.
3. Statistics from the Ministry of Education. Figures refer to the proportion of young people completing lower secondary education (approximately 99 per cent of the cohort) who continue at the upper secondary level. Participation rates for 17 year olds are similar to those of the 16 year group given the very low drop-out ratio in Japan.
4. Information provided by national authorities.
5. 19 and 20 year-olds.

Source: Except where otherwise stated, *Educational Trends in the 1970s, op. cit.* The age refers to the beginning of the academic year. Completed with information provided by national authorities.

area for the 18-19 age group: more than 70 per cent of the 18 year-olds and between 45 per cent and 50 per cent of the 19 year-olds. It should be noted however that given the weight of apprenticeship, their position in relation to other countries varies from one extreme to the other depending on whether comparisons are made on the basis of total enrolments or on full-time enrolments in schools and colleges only (see differences between Table II.3 and Table II.3 *bis*). On the other hand, their success in covering a wide age range suggests that countries with well developed systems of "dual"-type technical/vocational education are more likely to succeed in catering for older groups than those where full-time schooling is dominant. The high participation rates of 18-19 year-olds in Denmark, where there is also a well-established apprenticeship system, seems to confirm this point.

More difficult to explain in terms of the structure of supply are the low enrolment rates in the United Kingdom, Australia and New Zealand. One significant factor is that these are the only countries where schools offer almost exclusively general and academic type programmes so that the potential for expansion through the schools sector is greatly reduced. In 1981/82 only 31 per cent of the 16 year-olds and 19 per cent of the 17 year-olds attended schools in England and Wales, a figure that rises to 48 per cent and 30 per cent if full-time Further Education is included[6]. An additional 18 per cent of 16 year-olds and 19 per cent of 17 year-olds enrol in part-time day and evening courses. Another explanatory factor is that children start schooling at an earlier age (at 6) and thus by the time they are 16 many have had more than ten years' education. However, it is surprising that the presence of the Further Education sector in the United Kingdom and similar organisational arrangement as TAFE in

Australia and in New Zealand – all of which were set up to provide alternatives to schooling mainly in the form of vocational/technical and part-time studies – have not succeeded in attracting young people to the extent that could be expected. Indeed, Further Education Colleges would appear to have, at least in theory, many of the features deemed desirable for the education and training of older adolescents and for new approaches to training (see Chapter III).

Distribution by Major Type of Study: General, Technical and Vocational Education

Here we attempt to give a more detailed picture of the structure of provision in terms of the *nature* of the education and training offered to young people at the post-compulsory level. This requires some clarification of the terms used, although the figures in Table II.4, on which the analysis is based, correspond to the definitions adopted in each country. There is no need to dwell on the different definitions of general education; but there are significant variations among countries in terms of the stage at which vocational and technical education begins, which should be kept in mind if international comparisons are not to be distorted.

Vocational education is understood here as the preparation for skilled or highly skilled worker occupations. It usually entails more practical studies offered in schools, apprenticeship or other forms of combined traineeship and education. While in a number of OECD

Table II.4. **Distribution of students in upper-secondary education**

Full-time and Part-time enrolments

	Vocational-technical education			General education
	Vocational	Technical	Vocational and technical	
Austria (82)	63.5	19.1	82.5	17.4
Belgium (82)[1]	27.7	27.8	55.5	44.5
Denmark (81)	21.3	38.4	62.6	37.5
Finland (81)	35.9[2]	13.6	49.5	50.5
France (82)	47.7	12.5	60.2	39.8
Germany (82)	68.7	10.8	79.4	20.5
Greece (79)	14.0	4.5	18.5	81.5
Ireland (79)	32.1	0.6	32.7	67.3
Italy (82)	21.6	44.5	65.1	33.9
Japan (82)			30.3	69.7
Netherlands (82)	20.4	38.9	59.3	40.7
New Zealand (82)			24.6	75.4
Norway (81)			56.4	43.6
Portugal (79)				
7th to 11th years			9.6	90.4
10th to 11th years			27.8	72.2
Spain (81)	29.9	15.9	45.8	54.2
Sweden (82)	13.9	56.1	70.0	30.0
Switzerland (83)	66.8	8.3	75.1	24.9
Turkey (81)	14.0	13.8	27.8	72.2
United Kingdom (81)[3]			43.3	56.7
United States (80)	24.0		24.0	76.0

1. French and German-speaking courses only.
2. Including 2.3 per cent apprenticeships.
3. Students from 16 to 18 years old. In view of the available information it was estimated that two-thirds of full-time students and 90 per cent of those enrolled in part-time day courses in Further Education were enrolled in technical/vocational education.

Source: *Educational Trends in the 1970s, op. cit.* Completed with information provided by national authorities.

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countries (e.g. France, the Netherlands, Spain) vocational education programmes begin to be provided at the lower secondary level, in most of them they are fully included at the upper secondary stage; still in others, as in North America and Japan, they tend to be offered beyond the secondary level, either within the formal sector, in enterprises or in combined arrangements. The term *technical education*, not always used in national education statistics, commonly refers to programmes preparing for technician and higher technical occupations, all of which are provided at the post-compulsory secondary and higher levels. Insofar as they constitute a branch of upper-secondary education they are typically of longer duration than vocational programmes (or require higher entry standards), they have a stronger theoretical and scientific orientation and most often qualify for access to higher education as well as to middle-level jobs. In some countries, these courses are longer than general programmes and the qualifications to which they lead may be sometimes equivalent to those granted by short-cycle higher education institutions.

The degree of differentiation among the three types of programme, and the employment or social connotations of these distinctions, vary from country to country as well as within countries. In some cases, the distinction is strongest as between general education on the one hand and the technical/vocational sector on the other, the common characteristic of the latter pair being relevance to qualifications for employment; a view which is often questioned because of technical education's strong transfer orientation. In other cases, the trend is to group general and technical education together, having regard to their equivalent educational and occupational status in contrast to the lower-ranking vocational programmes. The distinction seen between long and short upper-secondary lines of study, or between upper-secondary and vocational education, reflects this same attitude.

The relative importance of each major type of study within total upper-secondary provision can be shown with different indicators of student participation: new entrants, total enrolments, participation rates of different cohorts, flows, diplomas awarded. The Secretariat report[7] on student flows presents quite a detailed picture for the four countries surveyed but, given the lack of similar data for other countries, the present analysis relies primarily on figures on total enrolments in formal upper secondary education, including apprenticeship.

From Table II.4, showing the distribution of students between general and technical/vocational education, it is possible to distinguish three groups of countries within the OECD area. A first group, which includes most Northern Continental European countries, is characterised by the dominance of the technical/vocational sector which enrols more than half, and quite often two-thirds, of all students in upper-secondary education. While there is a relation between the structure of upper-secondary systems (prevalence of the schooling or the dual approach) and the respective weight of general and technical/vocational education, this correspondence is not as close as it is sometimes assumed. Countries with strong dual systems have indeed the highest proportion of young people enrolled in technical/vocational programmes; but Sweden, with its typical schooling approach, has a similar distribution: two-thirds of its students are in technical/vocational studies, one third in general education. Denmark, France and the Netherlands, with a dominant school sector complemented by a relatively strong apprenticeship sector, also have around 60 per cent of enrolments in these types of studies. Wide opportunities for technical and vocational education are therefore found in countries with very different organisational arrangements.

On the other hand, there are marked differences among countries where the schooling model is prevalent. In contrast to Sweden, there is a second group of OECD countries with high participation rates and a quasi-monopoly of school provision, namely the United States, Canada, Japan, where the majority of students follow general/academic courses: 69 per cent

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in Japan, 76 per cent in the the United States, the remaining attend vocational programmes[8]. Significantly it is in these countries where vocational education and training are mainly provided after completion of secondary education.

A third group of countries is characterised by the dominance of the school sector and comparatively lower participation rates at the post-compulsory level. The United Kingdom, New Zealand, Spain, Greece, Portugal and Turkey are the countries with the highest proportion of students in general education: more than half and up to around 80 per cent or more of all upper secondary enrolments are in these programmes. The close correspondence between participation rates and the weight of general education in European countries (the exceptions being Belgium and Italy) suggests that, contrary to the United States[9] and Japan, the expansion of post-compulsory provision in Europe entails the accrued weight of the technical and vocational sectors.

The strong weight of the vocational sector in many of the advanced European countries is even more pronounced if the indicator used is the type of diploma awarded at the end of the upper-secondary level (Table II.5). These figures give a more accurate picture than those on enrolments since the latter tend to overestimate the share of the general/academic sector where many courses are longer and also because of the recent trend in some countries to provide a first year of general upper-secondary education for students who then proceed to vocational lines of study.

A striking phenomenon reflected in Tables II.4 and II.5 (in the very few countries with available information) is the concentration of young people in either general or in vocational education and the relative low participation rates in long-cycle technical programmes. A notable exception is Italy where technical studies enrol 44 per cent of all upper secondary students. This may be partly due to the way in which the statistics are presented, i.e. lack of

Table II.5. **Distribution of graduates from different types of upper-secondary education**

	Vocational-technical education			General education
	Vocational	Technical	Vocational and technical	
Belgium (81)[1]	16.8	40.4	57.2	42.8
Denmark (80)	17.3	63.2	80.5	19.5
Finland (81)			67.7	32.3
France (82)	59.4	12.3	71.7	28.3
Germany (82)	75.0	7.3	82.3	17.7
Greece (79) M			42.1	57.9
F			19.4	80.6
Italy (81)[2]	26.7	37.0	63.7	36.3
Netherlands (80)			34.9	65.1
Norway (80)[3]			57.2	42.8
Portugal (77)				
9th year			20.1	79.9
11th year			21.6	78.4
Spain (81)	33.9	8.7	42.6	57.4
Sweden (82)	28.6	45.5	74.1	25.9
Turkey (80) P	15.3	17.2	32.5	67.5
Yugoslavia	44.7	29.5	74.2	25.8

P = Provisional.

1. French and German-speaking courses only.
2. Including "degrees" from normal schools and from artistic schools which are of a lower standard than the "maturità".
3. 11th and 12th-year diplomas.

Source: *Educational Trends in the 1970s*, *op. cit.* Completed with information provided by national authorities.

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disaggregated data on technical and vocational courses. Also, in countries with large vocational sectors, in particular where a wide range of apprenticeship schemes exist (e.g. Germany, Switzerland) and formal or informal hierarchies are thus more difficult to detect, quite a number of courses lead to qualifications which, if not legally, at least in practice are equivalent to middle-level technician.

Even accepting a possible statistical underestimate of secondary technical education, there are clear signs that this vacuum is a cause of growing concern, particularly in European countries, whatever their structure of provision. In Germany, for example, it is claimed that demand and more promising employment prospects could develop in the area of "middle-level skills" or "middle-level occupations" which combine technical skills with managerial qualifications, if a wider range of education and training opportunities were provided. Until now, with the exception of a few programmes for those holding an *"Abitur" (Sonderausbildungsgänge der Wirtschaft für Abiturienten)*, there are no institutions which prepare *directly* for middle-level positions. The normal route requires prior completion of an apprenticeship scheme, a period of work experience and subsequent attendance in a variety of further education programmes of three months' to a maximum of three years' duration. The concern for opening up career opportunities for middle level occupations is shared by other OECD countries where the bulk of those completing long-cycle general and technical secondary education continue on to higher education so that few departures take place at this intermediary level. Table II.6 illustrates this phenomenon.

Reforms over the past two decades aimed at granting greater opportunities for entry into higher education – including universities – to graduates from long-cycle technical education have accentuated this vacuum and may account for the current reluctance to expand these programmes further. The lack of departures from the system at the end of long-cycle upper-secondary education has been partly compensated for by the development of short-cycle higher education institutions, by now often the main providers of middle-level technicians. This pattern, however, is far more established in North America than in Europe, as evidenced by the massive growth of public and private post-secondary technical colleges open to all qualified secondary school leavers in the United States and Canada. In the United

Table II.6. **Situation of a cohort after the end of secondary education**

Percentages

	Germany (1980)	France (1977)	Italy (1981)	Sweden (1980)
Continuing to:				
University education	17	18.5	23	15
Non-university education	5	10		15
Leaving with:				
General secondary education	4	3.5	5	4
Technical secondary education	–	5	8	3
Vocational secondary education	61	40.5	36	47
of which: apprenticeship	(61)	(8.5)	(18)	–
Having left before completion of upper-secondary education	14[1]	22.5	28	31[2]

1. More recent estimates by German autorities are, respectively: 21; 3; 4; –; 62; (58); 10.
2. More recent unofficial figures indicate a decrease in the proportion of young people leaving at different stages before completion of upper secondary education.

Source: "Student Flows in Four Countries", *op. cit.*

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States, the trend to shift vocational training beyond secondary schooling is further illustrated by the fact that most apprenticeship schemes there recruit young people over 20 years old. In Japan, where more than 50 per cent of youngsters leave formal education upon completion of secondary schooling, responsibility for further training is largely within the enterprises.

The Non-formal Sector

It was stressed earlier that the growth of the non-formal sector was to be seen as a major feature of total post-compulsory education and training provision. This is a complex and rapidly evolving sector about which statistical data and information are not readily available and often difficult to use for analytical purposes. The data we use here derive from a Secretariat survey carried out in the same countries as those covered in the study of student flows, France, Germany, Italy and Sweden[10]. This admittedly limited country coverage does nevertheless illustrate current developments and allows one to highlight relevant issues that are applicable to other countries.

The survey shows that the countries reviewed use a similar range of schemes and programmes, although their respective weight varies from country to country. Five different types of training programme were identified: special programmes for the severely disadvantaged; labour market training schemes; second-chance education and training opportunities; employment training contracts; and popular education.

Special programmes for the severely disadvantaged. A number of such programmes were launched in Member countries in the framework of youth employment policies. Many of them, e.g. subsidised jobs, public relief programmes, have no training objectives. Others are of very short duration and focus on guidance and counselling. Those considered here include an education or training component designed in a very flexible way to respond to the particular needs of the young people concerned. Participants are as a rule very young, not eligible or qualified to enter other formal or non-formal programmes and are generally the unemployed. Having failed in compulsory education, they are among the most hostile to any type of further formal schooling. Alternation therefore plays an important role in these programmes, the objectives of which are to offer some remedial education or preparation for the world of work.

Under this heading can be included the *Berufsvorbereitende Massnahmen* schemes organised by the Bundesanstalt für Arbeit in Germany. Some offer remedial education *(Grundausbildungslehrgänge)*; others prepare young people for subsequent entry into regular vocational training *(Förderunglehrgänge);* others are particularly intended for young foreigners. It should be noted that, in addition, offerings preparing young people for training and/or employment are to a growing extent provided in schools *(Berufsvorbereitungsjahr)*. For those disadvantaged young people who do not succeed in entering a normal form of apprenticeship afterwards, a special programme has been launched to provide full qualifying training by using special promotion measures (remedial instruction and social-pedagogic support). There are two types of *stages de formation alternée* in France; the shorter ones aim at facilitating the socialisation of young people in the world of work; the longer ones provide some vocational training that may lead to a qualification or to entering a regular course. A similar role is performed in Sweden by *courses adapted to local needs*, organised in the framework of the youth guarantee. The courses are new, and tend to replace the previous vocational preparation schemes and some of the "special courses" intended for those who do not enter the regular two-year vocational courses. In Italy, although it is not their main objective, the *Regional Centres for Vocational Training* do perform a similar function, particularly in the South[11].

Labour market training schemes. These courses are not designed primarily for young people; they serve a larger public, normally unemployed workers or persons at risk of becoming unemployed. However, in some countries they have been adapted or their access criteria modified to facilitate participation by young people. The content of these programmes is strongly vocational and they lead to certificates or diplomas which as a rule are not those delivered by the initial training system. They are usually provided by various bodies or associations in the world of work, who receive state financial support, or in a network of training centres under a public authority.

Examples of such courses are those provided in Germany in the context of adult vocational training *(Fortbildung, Umschulung)* or the technician training organised by the *Chambers of Commerce and Industry;* in France, this type of course is offered by the *Association pour la formation professionnelle des adultes* or in the form of *cours conventionnés* organised by various bodies and associations. In Sweden they include the labour market training courses (AMU) under the Labour Administration. In Italy, the *Regional Centres,* formerly under the direct control of the Labour Ministry, are in a somewhat different category in that they are mainly intended for young people.

Second-chance education and training opportunities. Under this heading are grouped a number of schemes and programmes which, as with the preceding category, are not specifically addressed to young people, but serve a broader clientele. Their main purpose is to prepare for the same diplomas and certificates, general and vocational, as the initial education and training system. Their syllabuses are, therefore, the same, but teaching methods and participation patterns differ. Evening or correspondence courses are typical forms of provision. An interesting development is found in Sweden where full-time participation in such courses has increased with the help of special grants made available to students. It follows that these opportunities are closely linked with the formal sector, in terms of both overall control and practical organisation. In Germany the *Bildungsbeihilfe-Program* aims at compensating educational deficiencies of young unemployed persons, in particular by helping them acquire the *Hauptschule* certificate (end of compulsory education).

Examples are some of the French *cours conventionnés,* an outcome of the former *promotion sociale* opportunities. A similar role is played in Sweden by the *municipal courses for adults.* In some cases, emphasis is on the preparation for vocational or technical diplomas; in Sweden many students seek to obtain qualifications giving access to universities. The survey suggests that such opportunities are developed where there exists a well established system of general and occupational qualifications delivered by the school sector.

Employment/training contracts. Schemes of this type have been only recently developed; they first appeared in France in the context of youth employment policy and were subsequently adopted in Italy and Belgium. Similar opportunities have been established in Germany by combining *Arbeitsbeschaffungsmassnahmen/ABM* (employment-creating schemes) with part-time education elements. Such a combination of *Arbeit und Lernen* (work and learning) aims at attracting unemployed youth who show no motivation to pursue full-time education programmes. Their extension was recommended in the recent *Bildungsbeihilfe* programme. It may of course be argued that employment/training contracts are not really a new type of scheme in view of the fact that, as apprenticeship, they are based on the alternation principle: participants have a particular type of working contract with an enterprise and receive training within or outside this enterprise. It involves the same risk, that is, their not being used essentially as a training device, but rather as a more flexible recruitment and employment possibility by employers. These schemes were originally intended for the unemployed, but are increasingly used by young people who already have a qualification, and want to upgrade their skills and competences. In France there are two types

Table II.7. **Estimated Participation of Young People under 25 in Different Types of Non-formal Education and Training Schemes**[1]

Early 1980s

Types of training	Germany[2]	France	Italy	Sweden
1. Special programmes for the most disadvantaged	Berufsvorbereitende Massnahmen 31 200	Stages de formation alternée 15 000	Regional vocational training –	Courses adapted to local needs 8 000
2. Labour market training schemes	Further Training CCI training 57 500 + 7 700	AFPA Cours conventionnés 50 000	Regional vocational training 102 000	AMU 13 000
3. Second chance education and training opportunities	–	Cours conventionnés 50 000	–	Adult municipal education 35 000
4. Employment/training contracts	«Arbeiten und Lernen» n.a.	E/T contrats 20 000	E/T contracts n.a.	–
5. People's education	People's Universities 8 600	–	–	People's Universities 5 000
Total (under 25s)	105 000	135 000	102 000	61 000
Size of an age group	1 000 000	800 000	950 000	120 000

1. Includes only young people pursuing at least a three-month full-time equivalent training.
2. More recent estimates by German authorities are:
   1. 49 000
   2. 81 500
   3. 5 000
   4. 9 500
   5. 13 000

Source: OECD Survey on Non-Formal Education and Training in Four Countries (in preparation).

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Table II.7*bis*. **Estimated Participation of Young People in on-formal Education and Training by Type of Programme and Age Group**[1]

Type of programme	Germany					France				
	16-17	18-19	20-22	23-25	Total	16-17	18-19	20-22	23-25	Total
1. Special programmes for the most disadvantaged	23 200	4 000	4 000	–	31 200	6 000	4 500	4 500	–	15 000
2. Labour market training schemes	4 500	4 500	26 700	29 500	65 200	7 000	7 000	18 000	18 000	50 000
3. Second-chance education and training opportunities						7 000	7 000	18 000	18 000	50 000
4. Employment/training contracts						500	3 000	5 000	4 000	12 500
5. People's education	1 700	1 700	2 600	2 600	8 600					
TOTAL	29 400	10 200	33 300	32 100	105 000	20 500	21 500	45 500	40 000	127 500
Population 15-24 (thousands)					9 880					8 502

Type of programme	Italy					Sweden				
	16-17	18-19	20-22	23-25	Total	16-17	18-19	20-22	23-25	Total
1. Special programmes for the most disadvantaged						8 000				8 000
2. Labour market training schemes	70 000	20 750	5 350	5 900	102 000	1 600	1 600	4 900	4 900	13 000
3. Second-chance education and training opportunities						2 300	10 600	11 000	11 000	35 000
4. Employment/training contracts										
5. People's education						500	2 250	2 250	5 000	10 000
TOTAL	70 000	20 750	5 350	5 900	102 900	11 900	12 700	18 150	18 250	61 000
Population 15-24 (thousands)					8 693					1 144

1. Includes only young people pursuing at least a 3 month full-time equivalent training.
Source: OECD Survey on Non-Formal Education and Training in Four Countries (in preparation).

of employment/training contracts: a shorter one focusing on adaptation to a job, and a longer one geared to the acquisition of a further qualification. Most contracts are of the former kind; they are mainly used by young people who have already obtained a first vocational qualification.

Popular education. This is one of the oldest forms of adult education, launched and supported by social movements as early as the latter half of the 19th century. They are well established in Sweden and Germany *(Volkshochschulen)*; France has a long tradition of *éducation populaire*. They offer a wide variety of courses, most of which are very short. As a rule they have no occupational purpose. However, they allow for the preparation of general education credentials, with very flexible patterns of participation. Similarly in Sweden, they provide a variety of courses ranging from arts and sport to vocational education in fields such as journalism, media, environmental protection. Recreational leaders are trained in these schools. Completion of some courses offered in Folk High Schools also qualify students for admission into higher education. In Germany the *Volkhochschulen* traditionally did not have an occupational purpose either. However, they are increasingly providing courses that have an employment value: information and computer sciences, English for professional use, etc. They also prepare many young people for certificates such as *Realschule* certificate, *Abitur, Fachhochschulreife,* and vocational qualifications.

Table II.7 provides estimates on numbers enrolled in the various types of schemes and shows the order of magnitude of the contribution of the non-formal sector to the education and training of young people in the four countries reviewed. It should be recalled that the schemes (or parts of programmes) involving less than a three-month full-time equivalent training, are excluded. It should also be noted that the figures given are not the number of participants, but Secretariat estimates of the number of persons who actually received a training, that is, who completed a course, or part of a course, and obtained some kind of certificate or qualification.

The conclusion that can be drawn from these estimates is that the non-formal sector plays a significant role nowadays in the education and training of young people. It can also be noted that the size of the non-formal sector varies substantially from country to country, as does the respective weight of the five types of non-formal education and training that have been identified. Table II.7bis gives a more precise picture of participation by age in these different types of scheme.

The different types of non-formal education and training identified above fulfill different functions. A first function can be labelled *initiation*; it covers remedial courses, pre-vocational education, and corresponds to schemes of intermediate duration. A second function is *training*: it serves young people who leave the formal system at different levels, but have received no initial occupational training; these schemes are usually of a longer duration. A third function broadly characterised as *specialisation* is performed by schemes intended for young people who have already completed an occupational training. It implies either *improvement and specialisation* in their field of study or *conversion* to another field of competence; in the former case, the duration of courses may be short, in the latter it is usually longer. Finally, a fourth function, *promotion* from one level of qualification (such as skilled worker) to another (technician). Table II.8 illustrates how each type of training has a specific function but in fact serves or may serve other purposes.

When considering together Tables II.7 and II.8, one can see that, quantitatively, the main functions performed by the non-formal sector are training, improvement and specialisation. In Italy numbers are higher in training; in Germany, in improvement and specialisation; in France and Sweden these functions are more evenly balanced. This suggests that the non-formal sector plays a different role, depending on the functions performed by the

Table II.8. **Functions Fulfilled by Different Types of Non-formal Education and Training Schemes**

Types of training	I	II	III 1	III 2	IV
	Initiation	Training	Improvement and Specialisation	Conversion	Promotion
1. Special programmes for the most disadvantaged	3	1	0	0	0
2. Labour market training schemes	1	3	3	2	3
3. Second-chance education and training opportunities	1	3	2	2	3
4. Employment/training contracts	0	3	0	0	1
5. People's education	0	3	0	0	1

3 Main functions(s) of the type of training considered.
2 Possible development.
1 Other functions frequently performed.
0 Other functions seldom performed.
Source: OECD Survey on Non-Formal Education and Training in Four Countries (in preparation).

formal sector. The emphasis of non-formal schemes on initial training is higher where the "residual group" left aside by the formal sector is large. Thus, the presence of these schemes contributes substantially to reduce the proportion of young people left without occupational training.

Participation of Girls and Women

The increase in female participation at the secondary and post-secondary levels is one of the more striking features of the development of education over the past decades in practically all Member countries. A detailed comparative analysis of trends in this area from 1965 up to the present for all levels and types of education and training is available in a forthcoming OECD report[12]. Here we will limit ourselves to a brief review of the current patterns of attendance of girls and boys at the post-compulsory secondary level.

Table II.3 on enrolment rates of the 16 to 19 year-old group by single year of age shows that, in spite of the progress accomplished within the OECD area, there are still marked differences among countries in overall attendance rates by sex. In Belgium and in the Nordic countries young women have by now higher participation rates than young men whereas they are equally represented in the United States and Spain. On the other hand, in a significant number of the countries listed 16 to 19 year-old girls remain at a clear disadvantage in relation to their male peers, a disadvantage which tends to increase with age.

The link between patterns of provision and female participation rates is clearly seen in Table II.1. In most countries where schools have a quasi-monopoly of provision there are no major differences in school attendance rates and consequently total participation rates are also relatively well balanced. A different situation is found in countries where an apprenticeship sector or other out-of-school part-time training opportunities are well developed: in the majority of these countries female attendance rates in schools are considerably higher those of males, whereas out-of-school provision is heavily male-dominated. The greater participation of young women in schools does not compensate for their disadvantaged position in out-of-school initial training: with the exception of France and

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Denmark, it is in these countries that differences between the sexes are more pronounced – to the advantage of male students. Further evidence is shown in Table II.9: among the countries with high participation rates of the 16-19 group, those with large apprenticeship sectors have the lowest share of female enrolments in total post-compulsory secondary education. This may be partly explained by the fact that they have a broader age coverage and girls tend to leave initial education at an earlier age than boys.

Table II.9. Girls as a Proportion of Total Enrolments in Different Types of Upper-Secondary Education*

Last year available

Australia	1981	50.9	Netherlands	1980	48.0
Austria	1981	42.4	New Zealand	1982	48.3
Belgium[1]	1982	50.6	Norway	1981	50.5
Canada	1982	49.1	Portugal	1979	50.5
Denmark	1981	47.5	Spain	1981	50.4
Finland	1981	52.3	Sweden	1982	50.4
France	1982	49.9	Switzerland	1983	43.2
Germany	1982	46.4	Turkey	1981	36.1
Greece	1979	36.3	United Kingdom	1981	44.8
Italy	1979	47.8	United States	1982	49.0
Ireland	1979	51.0	Yugoslavia	1981	47.2
Japan	1982	49.7			

*Including part-time vocational education and apprenticeship.
1. French and German-speaking courses only.
Source. *Educational Trends in the 1970s*, *op. cit.* Completed with information provided by national authorities.

The heavy concentration of girls in schools and the far wider use of out-of-school opportunities by boys is no doubt related to the type of courses offered in the different sectors. Table I.5 clearly shows that with rising rates of overall female participation, the sharpest differences in participation rates between young men and women are now in terms of the type of studies pursued.

Within upper-secondary schools in many countries *general education* subjects now enrol equal numbers of young men and women or even a female majority. The proportion of young women in *vocational subjects in upper secondary schools* is in general lower than in academic/general studies but in the majority of countries with relevant data, female students represent around 40 per cent or more of the total student body in this sector (see Table I.3). However, underlying there aggregate figures there are sharp differences between male- and female-dominated vocational courses, a persistent feature which applies to the whole range of OECD countries in spite of efforts and some progress achieved in recent years. Girls are more commonly found in courses leading to the tertiary sector occupations whereas they are heavily under-represented in most technological programmes. The clear male dominance in *apprenticeship* is explained primarily by the far greater weight in this sector of industrial as opposed to service and tertiary branches. Broadly-based apprenticeship systems have a more even balance between the sexes (38.6 per cent of women in apprenticeship in Germany) than those where schemes are more narrowly focused on the training for crafts and jobs in industry. These observations apply with equal relevance to the range of *labour market and skill training courses* organised partially or wholly outside the formal education system.

The greater concentration of female students in formal full-time education and in particular fields of study is both the expression of the progress accomplished in raising

women's levels of educational attainment and of the persistence of sex stereotyping and discriminatory practices.

The virtual monopoly the schools have in many countries over the education and training of young women reflects past government policies which favoured global expansion for the whole age group through the schooling sector and showed particular concern for reducing educational inequalities among the various socio-demographic groups. The success achieved in narrowing sex disparities has been facilitated to a certain extent by the lower costs involved in expanding school programmes which matched women's preferences or prepared for typical female occupations. The protected environment of schools and relatively easy adaptation of girls to the school milieu may also have contributed to gearing female demand towards formal full-time education and in particular to general education.

The concentration of girls in general education and corresponding under-representation in technical vocational lines of study is a frequent topic of concern. The OECD study on Educational Opportunities for Girls and Women argues that these are the lines that provide access to higher education so the female progress in these general branches of upper-secondary education is by no means unimportant. Yet, even this must be qualified by the observation that the certificates and qualifications which girls are most likely to achieve in these general tracks, whether in upper-secondary or higher education, have lost some of their marketability and utility in job markets typified by high levels of unemployment. It may well be that this female progress is indicative more of boys deserting the general courses to concentrate upon more vocationally-oriented qualifications that allow a better chance of finding a job rather than some more genuine achievement of equality. Further evidence of the concentration of girls in a very narrow range of options is provided by their high over-representation in certain subjects like the humanities and social sciences.

It should be noted, however, that high participation rates of women in general education may be less of a drawback than is sometimes claimed. In the first place educational standards and norms of general education are often higher than those of vocational courses. In addition, if it is accepted that girls prefer jobs in the tertiary sector and that expansion of jobs in the services and decrease in the share of the labour force in industry occur, this sector is likely to offer greater job opportunities. Then, it could be argued, a general type of education is likely to provide greater opportunities for such jobs than many vocational courses. Much will depend, of course, on curricular reform in both general and vocational education (see Chapter IV), and the extent to which the vicious circle of high female participation and low employment value of programmes can be broken.

Having stressed some of the positive results achieved, it must be added that the common pattern among young women to *stay on in schools on a full-time basis and to participate to only a limited extent in other types of formal education and training leading to a recognised qualification* no doubt reflects their continued disadvantage in society in general and more particularly in the employment world, which in this respect seems to have advanced at a slower pace than education. In addition to the higher incidence of unemployment among young girls are the difficulties they face in finding traineeship places in apprenticeship or similar opportunities in employment enabling them to enrol in work-study schemes or, more generally, in part-time studies. Of particular significance in this context is the evidence that, among employed teenagers, boys benefit from paid leave of absence for training to a much greater extent than girls. Recent figures from England and Wales show that in 1981/82, 15 per cent of 17 year-old boys and 3 per cent of 17 year-old girls were employed with day release, whereas 28 per cent of boys and 35 per cent of girls of the same cohort were employed with no day study[13].

COMMON PROBLEMS AND ISSUES

The foregoing analysis of the current size and structure of initial education and training systems for the 16 to 19 age group already suggests some of the problems and issues being confronted in this area. We will now look in detail at a few of these that are of particular significance to debates on future policies for the organisation of overall provision at this level.

Those Left Aside

A major concern in all Member countries is the fate of young people who in one way or another are excluded or marginalised from formal education at a relatively early stage. In the past, such labels as "early school leavers" or "those left aside" applied primarily to youngsters who did not complete compulsory schooling successfully, or in a normal way. In recent years, with rising participation rates at the upper-secondary level and the sharp decline in job opportunities for young people, the definition of educational disadvantage has obviously broadened. By now in a growing number of OECD countries it includes the shrinking minority who do not continue to any type of education or training beyond the lower secondary level, and it has gradually extended to those who try unsuccessfully to obtain a basic qualification at the upper-secondary level. The size of these groups in the four countries covered in the OECD study are shown in Table II.10.

In Denmark, in 1981 16.5 per cent of boys and 16 per cent of girls did not continue to any type of further education and training after completing basic compulsory education[14]. In the United Kingdom, in 1981/82 roughly 17 per cent of boys and 12 per cent of girls had no

Table II.10. **Early School Leavers**

Percentages

	Proportion of a cohort of young people who:			
	Do not complete compulsory education in a normal way* (1)	Do not continue to any type of formal post-compulsory education and training (2)	Leave in the course of post-compulsory education and training (3)	Do not obtain qualification at post-compulsory level (2 + 3)
France (1977)	12[a]	17[b]	8[c]	25 [b+c]
Italy (1981)	18[d]	16[e]	18	34[f]
Germany (1980)[1]	10[g]	10	4	14
Sweden (1980)	8[h]	21	10	31

* Figures under this column cannot be added to those in columns 2 and 3. This group includes both young people who do not continue with their studies and are thus included under column 2 and a number who in spite of their difficulties at the end of compulsory schooling enrol in some form of upper secondary education or training.

1. More recent estimates by German authorities are: 10; 6; 4: 10.

Definitions vary according to country

a) Early drop-outs from lower secondary vocational education.
b) Those who do not go beyond lower secondary education.
c) Those dropping out from school or apprenticeship.
d) Those who do not obtain the *Licenza media*.
e) Excludes young people entering apprenticeship at this level.
f) It is estimated that about 85 per cent of young people in apprenticeship do not obtain any type of vocational qualification.
g) Those leaving compulsory school without general school certificate.
h) Those taking special courses at the lower secondary level.

Source: "Student Flows in Four OECD Countries", *op. cit.*

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recognised lower-secondary leaving certificate and up to very recently around 40 per cent of young people did not enrol in any training programme beyond compulsory schooling[15].

Although these figures must be interpreted with caution – not only are there variations in definitions, but the social implications of "exclusion" differ from country to country – they are interesting in several respects. They show, for example, that countries with very different organisational arrangements at lower secondary level, such as Sweden and Germany, have a high proportion of young people completing basic full-time compulsory schooling. Moreover, as reflected in the high continuation rates in Germany, early diversification does not seem to entail necessarily a disadvantage in terms of access to qualifications at the post-compulsory level; nor does it determine the size of the group left out by the system at this stage.

Still, the pending phenomenon in advanced countries of a group of about 10 per cent of young people who fail or are marginalised before completing their compulsory schooling remains a matter of serious concern. It can, of course, be argued that a "hard core of excluded" will always remain, whatever the system or its stage of development. Nevertheless a certain number of young people with severe difficulties at this stage continue to some form of education and training or are able to find jobs, so that a few years later they may be better off than some of their peers who drop out during the course of upper-secondary studies without obtaining a qualification. This latter group still faces the highest risk of stigma and continued social disadvantage, aggravated by the fact that, as the group becomes smaller, the chances of overcoming the initial disadvantage decrease.

The growing problems faced in all Member countries by the existence of a substantial proportion of the 16 to 19 age group who do not continue beyond compulsory schooling or leave one or two years later without a recognised qualification need not be discussed in detail here since they are central to all chapters in the present report. A point of special interest at this point, however is suggested by the figures for Sweden in Table II.10 which show a relatively high number of young people who do not enrol in any type of further formal education in spite of the active policy of this country to attract and provide places for the whole 16-17 age group. It may, indeed, indicate a weakness of the schooling model at the upper-secondary level, at least in the European context.

Emphasis on an integrated upper-secondary school with a minimum of hierarchical differentiation is perhaps the more effective strategy to achieve greater equity *within* the system, that is, among students who do enrol at this level; however, the greater homogeneity in norms and standards carries with it the risk of excluding *at entry* a relatively high percentage of youngsters more likely to gain qualifications of equivalent value outside the school setting. Similarly, exclusion or, more appropriately, self exclusion, may occur in the course of upper-secondary studies. In the United States, where in 1981 94 per cent of 16 year-olds and 86 per cent of 17 year-olds attended schools – the majority being characterised as public comprehensive – 71 per cent of the 17 age group obtained a high school diploma considered as the first basic qualification. Interestingly enough, the high school graduation rate attained a peak in 1964 (76 per cent) and witnessed a slight but continuous decline throughout the 1970s. In the light of this problem of achieving a larger coverage within the established education and training system, the existence and further development of all types of non-formal provision and of opportunities for re-entry within the formal sector acquire special significance. Delayed entry is indeed becoming a common pattern particularly in the Scandinavian countries. Recent trends in initial out-of-school training are reflected in Tables II.7 and II.8.

The high priority assigned to this group in medium-term plans in all Member countries suggests that the numbers of young people leaving initial training without qualifications will continue to decrease substantially in the coming years. But the current experience of advanced

countries aiming at their total coverage equally points to the limitations of such policies, in particular with regard to the socially disadvantaged and low-ability groups. For many of these groups, work is and will remain their first choice after 9 or 10 years of compulsory schooling, and whatever the inherent value of education and training schemes, the absence of job opportunities, together with the dim prospects of employment, will not facilitate the task of policy-makers, teachers and trainers in enhancing the interest and motivation of young people or in convincing them that these are not primarily "holding tanks". Moreover, it is particularly difficult to see how long-term needs for a more flexible and mobile labour force – the typical arguments used to encourage further training – can be translated and applied to the type of practically-oriented programmes which "those excluded" prefer and where they are more likely to succeed.

It is very probable that the challenge of meeting the needs and interests of this category of young people as well as of the vast numbers of adults who have not had any formal education beyond compulsory schooling will provide the strongest impetus for reforms at this level in the coming years. The development of schemes cutting across the rigid boundaries of the formal and non-formal sectors, and those of education and training, will no doubt be one type of strategy. But it is clear that a sine qua non of any policy aimed at enhancing the career and life chances of those who have suffered from disadvantage or failure in education at an early stage is the provision and active promotion of lifelong or recurrent education/training opportunities, as a means of giving these groups a second chance to overcome their initial handicap some years later.

General, Technical and Vocational Education: Growth, Differentiation and Hierarchies

Post-compulsory systems are in many respects forced to become vast "clearing houses" for the higher levels of education and the world of work. This results partly from the importance assigned to the level and type of qualifications obtained at the end of upper secondary education, both for admission to higher education and in the recruitment of new entrants to the labour force, and partly by the political will of relieving compulsory schooling of its selective function. The selection and screening mechanisms being developed and the dilemmas posed in attempts to meet often conflicting objectives are discussed in Chapter V. The focus here is on the influence of the structure of supply on the allocation of students among different types and levels of courses and on some of the problems posed by expansion and changing patterns of demand.

As we have seen, three main types of course may be distinguished at this stage: academic and/or general programmes which everywhere remain the monopoly of schools, technical courses, which most often are also provided within the school sector, and vocational courses which are offered in various types of settings. In spite of variations in the use of these terms and problems of changing or blurring boundaries, this classification is widely used as a basis for forecasts and plans for future provision.

In the majority of Member countries, the policy of recent years has been to increase the weight of vocational education, both by channelling new groups through this sector, and also, in some cases, by altering the existing balance between general and technical/vocational studies. This shift has indeed taken place but in many cases not to the extent desired or foreseen. Some of the Southern European countries (Greece, Spain, Portugal, Turkey) are particularly affected by the deep-rooted and widespread public disaffection for vocational education and training and the familiar vicious circle which has characterised its development: low prestige and social esteem (strong educational and social bias in recruitment); few resources and low quality (low educational and employment value) ; lack of demand. In these

circumstances, many groups with wide-ranging viewpoints claim that unless these broader considerations are taken into account in future policies, there are serious risks that the expansion of vocational education will enhance social divisiveness without necessarily raising the quality of the training provided or its relevance to employment.

While these problems are familiar to other countries, the difficulties in decreasing the share of general education cannot be explained only, or even primarily in many cases, by lack of demand or young people's preferences. Increased competition for entry into many vocational branches and the rising proportion of rejected candidates from these options point both at a mismatch between demand and supply and to a gap between governments' intentions and reality. The combination of large cohorts, the high costs involved in setting up vocational programmes and the lack of traineeship places are of course key constraints in the pursuit of this policy. These constraints are particularly evident in countries such as Denmark, Germany, Norway, Switzerland, which developed a tenth year of full-time schooling offering general or so-called "pre-vocational" studies to many young people whose interests are primarily vocational, but who have not been able to find a training place either in school or in apprenticeship. The pursuit of vocational studies is often rigidly linked with the availability of places for apprenticeship or traineeship, and this is a significant factor in accounting for the decrease in participation rates in part-time vocational education in certain countries, like Australia and the United Kingdom, and for a substantial number of drop-outs in the Scandinavian countries.

Thus, by now academic/general courses cover not only a wider ability range but also growing numbers of youngsters who enrol either as a way of postponing choice or because they are unable to find places elsewhere. The growth and diversity of the student body has led to growing differentiation of general lines of study. A first step in this process of differentiation, observed already in the 1960s and 1970s, has been the sharpened hierarchy among the various lines of general education formally leading to equivalent qualifications, e.g. *Baccalauréat, Abitur, Maturità*. A more recent phenomenon in European countries is the growing differentiation between, on the one hand, the *academic* programmes geared primarily to the preparation for university studies and at the top of the pecking order, and on the other, programmes of *general* education with a stronger terminal, employment, or more polyvalent orientation. This trend is more pronounced in countries with high participation rates and where, because of its prestige (and entry restrictions of many vocational lines of study) the general education sector by now enrols both the highest achievers and increasingly also those with substantially low levels of educational attainment who do not succeed in joining the vocational stream. It is also related to the rapid growth of programmes leading to the service sector, e.g. social and commercial studies, where the distinction between general and technical education is less easy to establish.

With continued growth of education and training opportunities for the 16 to 19 age group, and in the light of foreseen economic and social trends, it can be reasonably assumed that a new sector of general studies – distinct from the academic programmes – with emphasis on preparation for working life will develop fast in the years to come. Examples of such general courses conceived as alternatives to academic lines of study already exist in a few European countries: the "higher preparatory courses" in Denmark, short general studies in the Netherlands, the recently created "Diploma Schools" in Switzerland specifically designed to cater for students who do not want to commit themselves to either academic or vocational studies.

Similarly, in Australia a movement began in the 1970s to devise alternative programmes in the last two years of secondary education "intended for students who, while wishing to continue or return to this level of education, were not suited by mainstream academic

programmes and were not aiming at matriculation for entry to higher education"[16]. In South Australia in 1980 alternative programmes were estimated to be catering for up to a quarter of all students enrolled in the final year of schooling[17]. Further indications of this trend are to be found in current emphasis on pre-vocational courses (e.g. the United Kingdom, Germany), and in proposals to develop short and longer programmes within the same disciplines or branches of study, in particular in social, commercial and some of the humanistic studies, as in Sweden[18]. Similar concerns are reflected in the proposals for reform of the examinatic system in the the United Kingdom, where the intention is to develop a new post- 16/17 examination parallel to the A levels, allowing for courses of a broader character and enabling students to keep options open and improve their employability.

The status and role of this sector within total provision is difficult to predict. The low status of general programmes in the United States and recent developments along the same lines in some European countries show that there are indeed high risks that, in the absence of clear guidelines and objectives, these programmes may slide to the bottom of the pecking order and become the residual options or last resort for young people; often precisely for groups who would benefit most from more practically-oriented vocational studies. Much will depend, therefore, on the capacity and ingenuity of educational policy-makers and practitioners in developing new paradigms and operational definitions of general education, better suited to working and societal requirements, as well as to the interests and abilities of average students, most of whom are likely to leave initial education at this stage. In recent years, growing recognition of the need to include subjects related to computer literacy and the use of new information technologies as part of general education, have given added impetus to experimentation in this area. Success along these lines would allow many of these programmes to become part of an intermediary sector, in between the strictly academic and vocational options, and thus fill a vacuum currently existing in many systems as a result of this sharp, and in many respects anachronistic, dichotomy.

It should be noted that in some countries, as in Italy, France, Belgium, a similar process of increased differentiation is found in long-cycle technical studies. While some lines (technology, computer sciences) have gained status often comparable to the more prestigious traditional academic programmes, other programmes, particularly among those leading to tertiary sector activities, rank low in terms of both their education and employment value. While this is clearly the consequence of broader developments in the world of work (in particular the absence of jobs) the slow process of redefining their occupational orientation has led to blurring the boundaries with many general courses with which they share the risk of increased devaluation.

The diversification of vocational education has also led to sharpened hierarchies within this sector. From the conclusions of the OECD study on student flows, at least two distinct levels of vocational training can be identified in many countries. The "higher" level includes well established vocational programmes, demanding strict standards of professional competence and a good basis of general education; at the "lower" level are courses which provide young people with a chance to acquire a basic qualification and facilitate their transition to working life. Obviously, there is a wide range of courses in between these extremes and informal hierarchies are still far greater, but it is interesting that in many cases this dualism has been formalised in one way or another. In France, the Netherlands and Sweden, there are two separate streams of vocational education; in France they start at different levels, in the Netherlands they are organised sequentially. Switzerland and Austria, where great importance is attached to the entry standards and quality of apprenticeship, full-time training at a lower level or a second level of apprenticeship has been formally introduced. In other countries, where apprenticeship schemes do not have the same reputation, many of these

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schemes are seen as providing a second level of training, distinct from those providing full vocational training. Distinctions between formal and non-formal vocational training often point to the existence of this hierarchy.

Whereas in recent years much of the expansion due to the increase in participation rates of the "new groups" among the 16 and 17 year-olds concentrated on the lower levels of vocational training, in the coming years, with rising levels of educational attainment and wider coverage of provision, the pressures on growth and diversification are likely to shift towards the more advanced vocational courses. This is already the case, for example, in France and Sweden. Many of these courses will require greater polyvalence and a stronger scientific and technological basis, often difficult to design and organise in sharply segmented systems.

Whether the type of setting in which vocational education is provided (school, dual, non-formal) will play a significant role in efforts to blur some of the sharp dichotomies between general and vocational education or between education and training, is difficult to determine. In all countries, long-standing values and traditions within the global society are perhaps the most important factor in accounting for the sharpness of the schism between education and the training cultures. Still, it could be argued that organisational arrangements are by no means a neutral factor in promoting changes in attitudes, and that, whereas dual systems seem to have greater success in terms of overall coverage and in coping with the weakest groups, in this area they are likely to advance at a slower pace than school-based systems. Indeed, the main underlying principle of dual provision is precisely the maintenance of two clearly separate sectors with different or even contrasting values: one dominated by an academic/traditional education type ethos, the other by training/vocational productive work-related values. Clearly, the diversity of programmes provided within each sector allows for gradations between these two extremes; but their separate development, lack of organisational and administrative links and few opportunities to transfer, render coordination or a degree of integration more difficult. Even greater difficulties in bridging the gap between the two cultures are faced in countries like the United Kingdom, where, traditionally, the responsibility of schools has been confined almost exclusively to general education.

It should be noted, however, that in countries where the economic and social standing of technicians and of productive work is relatively high – which is precisely the case of those with dual systems – and where vocational education carries less of an educational and social stigma, these dichotomies have less serious social connotations.

A final, but highly relevant, consideration is that patterns of provision which entail a sharp segmentation between academic oriented and vocational studies, with no middle ground alternatives, pose serious problems to many young people – often those with average levels of educational attainment who do not have aspirations to continue to higher education and who do not want to be committed to specific vocational programmes. In some cases, the policy is to develop common foundation courses for the first years of upper-secondary education; however, as it becomes evident that choices cannot be indefinitely postponed and that alternatives must be provided at this level, the need to develop other measures in order to cope with the uncertain or undecided is felt with growing acuteness. Given the slow process of diversification or of developing new alternatives, the focus now is in the first place on setting up more effective guidance and information systems. Secondly, a variety of "bridges" and "ladders" are being envisaged in order to allow for greater student mobility across programmes and institutions. But in this area results are disappointing and reality tends to lag far behind rhetoric and intentions. Relatively few students change courses after entry, that is, on the basis of their own experience and judgement of their initial choice. It is paradoxical that all agree that adolescence is typically a period of transition and of search for an identity; also

that decisions at this stage have long-term implications for the career and life chances of young people. Yet, few are the opportunities given to the young to change their minds, redress mistakes and acquire experience through trial and error.

THE FURTHER DEVELOPMENT OF THE POST-COMPULSORY SECTOR

The need to respond to educational, social and economic problems common to most Western industrialised societies leads to solutions which, although sought in accordance with the distinctive features of each organisational framework, often entail relaxation of some of the typical differences between the various settings within which education and training are provided at the post-compulsory level. Current trends in the schools sector and in dual systems are indicative of this development; so are the changes brought about by the proliferation of non-formal programmes and schemes.

The Narrowing Gap between "Schooling" and "Dual" Forms of Provision

Within the schooling sector, measures leading to a narrowing of the gap between school programmes and apprenticeship schemes or other less formal types of provision are typically those aimed at strengthening the links between education, training and work. Many of them reflect the broader policy concern of public authorities for developing a framework which allows for moderate "de-schooling"[19] or de-institutionalisation in the offer within the formal system available to older adolescents.

A first set of measures involves the introduction of periods of work experience as an optional or even compulsory requirement in the curricula of full-time students. Although by no means a new or original idea, its significance is mainly due to the increased efforts and commitment to carry out this policy in school-based vocational programmes (France, Netherlands, Sweden). More radical is the idea now seriously discussed in some countries (as in Sweden, Yugoslavia) of introducing periods of work experience in academic lines of study. In Sweden, the new Government Bill on the reform of upper-secondary education which passed through Parliament in May 1984 provides for the inclusion of periods of work experience – a maximum of three weeks per year of study – in all lines of study and specialised courses at this level. A key problem in Sweden, Yugoslavia as well as in other countries interested in this type of scheme is the difficulty of ensuring sufficient traineeship or work places for the whole student body, particularly when concurrently similar measures are introduced for pupils at the end of their compulsory schooling.

Secondly, in many Member countries the political will to increase provision for part-time studies within the formal sector and to develop schemes allowing for different forms of alternation between education, training and work is also leading to slow but significant changes in the typical schooling model. For the majority it is not a question of replicating the Germanic type of the dual system, or even of merely extending existing apprenticeship arrangements: the purpose is also to develop other types of work study schemes (e.g. sandwich, day release programmes, traineeship schemes) that are compatible with national traditions and take account of local requirements, possibilities and priorities.

Whether these schemes are initiated by schools, or (as is more frequently the case) schools provide the educational component of training schemes offered in cooperation with government agencies or the private sector, the development of part-time studies entails new challenges and responsibilities for education and school authorities.

As partners rather than sole masters and organisers of the new courses, education authorities are under greater pressure for accountability and relevance in relation to externally-set objectives and requirements. Moreover, in the face of stronger competition from other sectors offering education and training opportunities, they must reconcile a more dynamic, outreach type of organisational approach, with their responsibility for maintaining the standards and qualities of an education service primarily geared to broader and long-term objectives. Thirdly, it is clear that changes in patterns of attendance and in the general orientation of schools can be the result of individual initiatives as much as of deliberate policy measures. Evidence on the numbers of young people who are currently employed or engaged in other outside activities while formally attending schools on a full-time basis illustrates well the less dominant role played by schools in the daily lives of many older adolescents. An extreme example is found in the United States where, in 1980, more than 70 per cent of young people attending the last year of secondary education were in employment. Among those employed 71 per cent worked more than 15 hours per week[20].

Finally, it is important to note that progress in attempts to change the traditional full-time schooling model is rather slow. This is not only because of internal rigidities, traditions, bureaucratisation or vested interests, but also (and increasingly so) because of the diminishing opportunities for work experience and job training outside the school milieu.

Even in countries where the dual pattern of provision is prevalent, there are now signs of a greater emphasis on schooling and of a narrowing gap between the schooling and dual approaches to education and training. Examples of this move within the school sector are the generalisation of an additional year of full-time education beyond compulsory schooling in some regions of Germany, Switzerland and Austria, the recent development of full-time vocational schools *(Berufsfachschulen)* and the rapid increase of enrolments in general education in Germany. However, this expansion, particularly at a time when large cohorts are entering this level, has not necessarily taken place at the expense of vocational education or of dual forms of training. It primarily reflects a trend to postpone access to apprenticeship to a later stage: after an additional year of general education; after a general upper-secondary qualification, including the *Abitur* or *Matura.*

Less answerable to statistical evidence, but equally significant, are recent developments within the dual sector itself which reflect not only a relatively stronger emphasis on schooling but also an increased formalisation of the training provided within enterprises. An indication of the stronger role played by schools in apprenticeship is the growing number of schemes which in Germany now require two days per week attendance in vocational schools *(Berufschulen)* instead of the traditional pattern of one day per week. Also significant is the gradual introduction in Germany of a basic vocational year as the first year of apprenticeship. Depending on the regions and on the fields of occupational training, this year is offered either in a dual form – part-time school and part-time enterprise training – or in full-time vocational schools. In both cases the aim is that it be recognised as the first year of an apprenticeship programme.

The formalisation of training within enterprises reflects employers' efforts to maintain in-firm training and responds to changes in the organisation of work and in the type of qualifications required. Large enterprises and the growing number of industries using highly sophisticated equipment, which for efficiency and safety reasons cannot be used for training purposes, have gradually developed special training centres where teaching takes place on the basis of simulation rather than in the actual workplace. The need to strengthen the technological and scientific basis of many of their programmes also leads enterprises to strengthen the theoretical and "schooling" styles of training. A different type of problem, but leading in a similar direction, is faced by many small enterprises: unable to organise within

their own premises the theoretical and practical instruction required by many apprenticeship programmes, firms working in the same field pool their resources to set up separate local or regional centres *(überbetriebliche Ausbildungsstätten)* for the training of their apprentices. The growing formalisation of training and its dissociation from work experience means, of course, that young people in apprenticeship spend far less of their time in the actual workplace.

New Relationships between Formal and Non-formal Education and Training

Up to the relatively recent past, there was a sharp distinction and separation between the formal and non-formal sectors. There were of course differences among countries and also in terms of the degree of coordination or integration between specific programmes in the two sectors. Typically, the formal sector was designed for the education and training of the young; the main function of the non-formal sector was to provide vocational training for adult workers, particularly the unemployed. The former was under the control of Education authorities, the latter under Labour administrations. Although persisting in some countries, this distinction, closely linked to the age and status of the client population concerned, has become markedly blurred in many others.

On the one hand, the formal sector is now more open to adult workers. Though this still mainly applies to post-secondary education, there are signs of change at the post-compulsory secondary level as well, particularly in the introduction of greater flexibility in the traditional sequential patterns of participation; in Sweden and Norway, for example, many young people interrupt their studies and come back some time later. On the other hand, adult education and training opportunities are increasingly used by young people and the required age for access has in some cases been lowered as, for example, in Portugal.

In addition, as already noticed, many new programmes have been launched in the non-formal sector within the framework of youth employment policies. Access criteria are less a question of age or even status. The non-formal sector serves those who have left the formal sector, sometimes quite recently, and though the emphasis is still on serving the unemployed, the provision is becoming increasingly accessible to all young people. The youth training schemes in the United Kingdom, for example, are addressed to all school leavers. In many countries, the two sectors seem to be increasingly viewed as a total "system" catering for the whole age group; quite a number of programmes that were formerly considered as "further" education and training in the non-formal sector tend to become part of the "initial" training experience of young people.

The extended coverage of both sectors, together with the fact that they often serve the same young people at different points in their life, gives rise to urgent problems of coordination between the respective institutions and/or schemes. It also calls for clarification of the different role and specific functions of non-formal schemes and of their links with those within the formal sector, so that the overall network of provision becomes more intelligible to employers and to young people themselves. This need for clarification (which was already noticeable after the fluctuations in the training measures of the mid-seventies) should in no way be perceived as necessarily affecting the flexibility that characterises the non-formal programmes. On the other hand, it may be that, in the absence of alternative policies, the non-formal sector, as it becomes increasingly established, will become more "formal". There are already examples of education authorities gaining control over schemes originally launched outside their own system.

Positions differ widely as to which policy option is the most viable or desirable: to further develop a non-formal sector, or to reform the formal sector so as to serve a broader clientele with different characteristics, interests and objectives. Some argue that the educational sector

has its own ethos and long-term objectives and, therefore, that the formal system cannot and should not attempt to provide all types of education and training, particularly in the field of occupational training. It is also argued that the development of a strong and innovative non-formal sector may be the best means of stimulating the formal system to change. An opposite argument is that too many public resources are being spent on non-formal schemes of limited pedagogical value. This may be a somewhat theoretical discussion since the two sectors are already in being. Solutions, therefore, are most likely to involve a compromise between these opposing views. A more realistic approach may be to take a look at the specific functions performed by non-formal programmes as they relate to the formal sector.

Many non-formal schemes are fulfilling a *transition function*, up till now mainly justified by the volume of youth unemployment. Trends in employment suggest that it will be necessary to maintain, if not to expand, these types of scheme. However, transition programmes could serve a wider purpose by providing a first work experience, or at least closer contacts with the world of work, to a greater number of young people leaving formal education. Most transition schemes are based on the alternation principle. The shorter employment training contracts are a typical example. Schemes similar to the French *stages de formation alternée* may fulfil this function, although they are as a rule intended for a different target group (see below). Such programmes are by nature enterprise-based and outside the scope of the formal system. In terms of number of participants, they may in fact be the most important type of non-formal programmes.

The *remedial function*, with a focus on numeracy, literacy and some basic skills, mainly concerns those who have failed in the formal system, particularly at compulsory level. It is a direct consequence of the reality that there is a sizeable proportion of young people who do not adapt to the climate of formal schooling and that an apparent duplication of provision is necessary if such people are to be given a fresh start and thus eventually be motivated to pursue training. In this respect, it is interesting to note that remedial programmes are generally based on the principle of alternation and that programmes in alternation are present in the formal sector. In Sweden and France, pre-professional courses in the formal sector are offered at the end of compulsory school to the less academically gifted (respectively 8 and 12 per cent). Another example is the case of the German *Berufsvorbereitende Massnahmen* schemes, which lost many of their students with the development of the various forms of a "tenth year" in the formal sector, except as regards young foreigners and the handicapped. Such transfers between the two sectors, however, do not in themselves diminish the value of a dual responsibility in offering adequate opportunities to all those in need. The essential issue, with respect to remedial programmes, is the number of drop-outs and the extent to which the young people concerned benefit from such programmes.

The need and desirability of having non-formal schemes which have a *complementary function* vis-à-vis formal education is scarcely questioned. It is generally recognised that mainstream secondary school programmes cannot and should not provide "end products" immediately adapted to the specific needs of firms; such specific job preparation is a well established function of in-company training. In actual practice, non-formal programmes, as we have shown, can be complementary in several ways, depending on whether their main focus is on "improvement and specialisation", or on "conversion". Relevant cases in this context are schemes in alternation, such as employment training contracts, as well as full-time courses provided in special training centres or within enterprises. Obviously the "complementary function" is assigned special importance when training opportunities are nonexistent or insufficiently developed within the formal system.

The setting up of non-formal schemes as *alternatives* to initial formal education is a far more controversial issue. Many courses and work study schemes that have been recently

introduced were ostensibly aimed at attracting young people who prefer or are more likely to succeed in a setting that differs from that commonly found in schools. But this is not their only aim, as can be seen in the variety of purposes and multiplicity of schemes falling under this heading as well as in the number of young people involved.

A first purpose is to offer additional opportunities for pursuing *initial training*. This is of particular importance in countries where training within the formal sector is weak, such as the United Kingdom, Australia, or Portugal. Here, "labour market training" schemes play a prominent role. They can also coexist with school training opportunities, as is the case of Italy, where regional training centres are mainly intended for a clientele of the same age as the *Istituti professionali* within the school sector.

A second purpose is to offer the possibility of acquiring the same or equivalent qualifications – both general and vocational – as in the formal system, but *at a different pace* and often in a different setting. This is typically the case of schools and programmes we have been referring to as "second-chance opportunities". These schemes can be offered within or outside the formal sector leading to the same or similar qualifications (general or occupational). They allow for a useful pluralism within total provision; problems of coordination are minor, to the extent that second chance routes in the non-formal sector are already closely linked to the formal sector.

A third purpose is that of *promotion* and *upgrading*. This may mean either acquiring a higher qualification in the non-formal sector or using the formal sector facilities in a different way, particularly through more flexible participation patterns. We have shown that within the non-formal sector, both labour market training and second-chance opportunities perform this function. Again pluralism may be useful here; but it may also be argued that such qualifications are too specialised or specific to the work environment to be provided for by the formal sector.

This brief review suggests that the links between the two sectors can best be considered on a disaggregated basis, in terms of the evolving roles and functions of different programmes within the total system of education and training. They obviously reflect national traditions both within the education system and the employment sector. It also shows that the main issues are less related to possible competition or duplication between the two sectors than to ensuring proper coordination among the wide range of non-formal opportunities which currently appear to be the more entangled part of the total "jungle" of post-compulsory provision.

NOTES AND REFERENCES

1. M. Locke, J. Bloomfield, *Mapping and Reviewing the Pattern of 16-19 Education*, Schools Council, London, 1982.
2. In 1981, in the United States 81 per cent of 17 year-olds attended secondary schools and 6 per cent higher education institutions. In Canada: 60 per cent were in secondary education and 12 per cent in post-secondary level (including the CEGEPs in Quebec).
3. Participation rates of the 17 year-old group have been taken as the main basis for international comparisons since in all countries this group is typically enrolled in post-compulsory secondary education.
4. In German, the term dual refers to the two training components of apprenticeship: enterprise-based and school-based; it does not relate to the coexistence of the two sectors. However, it appeared as a convenient term to characterise this particular model.
5. Manpower Services Commission: *New Training Initiative: A Programme for Action*, London, 1981.
6. Department of Education and Science, *Statistical Bulletin*, February 1983.
7. "Student Flows in Four OECD Countries", OECD, Paris (forthcoming document).
8. In the United States the distribution of students is approximately as follows: 39 per cent in academic, 37 per cent in general, 24 per cent in vocational courses. It should be noted that general programmes recruit the lowest ability groups and are at the bottom of the "pecking" order.
9. In the United States the percentage of young people choosing general as opposed to college preparatory and vocational courses rose from 12 per cent in 1964 to 42 per cent in 1979.
10. The survey has been limited to training schemes and programmes of at least three-month full-time equivalent and under public control or drawing of public funds, information in enterprise-based training not being available. The schemes and programmes that were reviewed are those concerning the 16-24 age group, although particular attention was devoted to the participation of the 16-18 and 18-21 age groups.
11. It should be noted that the Regional Centres for Vocational Training in Italy were considered as part of the formal sector in the Secretariat study on flows. They were nevertheless included in the survey of the non-formal sector as belonging to the latter, in view of their functions and organisation.
12. *Educational Opportunities for Girls and Women*, OECD (forthcoming).
13. Department of Education and Science, *Statistical Bulletin*, February 1983.
14. Data provided by the Danish Ministry of Education.
15. *Youth Employment in France: Recent Strategies*, OECD, Paris, 1984.
16. Department of Education and Youth Affairs: *Youth Policies, Programs and Issues*, Australian Government Publishing Service, Canberra, 1983, p.22.
17. *Learning and Earning*, Vol I. p.16, Australian Bureau of Statistics, Canberra, 1982.
18. Commission for the Reform of upper-secondary Schools, Stockholm, 1982.
19. De-schooling here understood as an attempt to decrease some of the rigidities and constraints resulting from the progressive institutionalisation of the educational sector and not in the extreme sense assigned to this term by Ivan Illich.
20. National Center for Education Statistics, *Youth Employment During High School*, May 1981.

Chapter III

INSTITUTIONS OF UPPER-SECONDARY EDUCATION

CONSEQUENCES OF PAST PATTERNS OF DEVELOPMENT

Questions relating to the nature and organisation of upper-secondary schools, in particular as they impinge on the ability of these schools and similar institutions to cope with a growing and increasingly heterogeneous student body, are central to educational policy concerns in all Member countries, whatever their overall structure of provision at the post-compulsory level. Here we attempt a critical analysis of the problems posed by current organisational arrangements within the formal *post-compulsory secondary school and college network*, placed against the background of the remarkable accomplishments of formal secondary systems over the recent past.

In the first place it should be recognised that the expansion of formal education has allowed for a dramatic increase in levels of educational attainment of the new generations entering the labour force. It has made possible a slow but unquestionable progress in terms of equality and social justice, with ample evidence of greater opportunities for social mobility. The proportion of the age group qualifying for higher education has significantly increased, and the integration of young people from very different social backgrounds was greatly facilitated. A common socialisation experience, which no other existing institution seemed capable of providing, is not the least of the achievements of the growth of formal schooling.

It should equally be recognised that many of the problems currently being faced are inherent in the process of growth and democratisation of educational provision and therefore not related to the specific features of upper secondary schools; the declining social and employment value of many qualifications now held by a much higher proportion of the age group is a case in point. Similarly, any criticism directed at formal education systems must be tempered by due acknowledgement of the difficulties which confront any institution in coping with broader social changes affecting young people, such as the changing structure and role of the family, the development of mass media, of consumption-oriented and more permissive societies. Finally, we should remember that in a situation of growing youth unemployment, whatever the merits and quality of upper-secondary programmes and schools, they will not contribute to creating jobs[1]. Efforts to encourage young people to continue in education for two or three more years are rendered even more difficult as unemployment grows rapidly around the 20-24 age group, thereby reducing the credibility of the arguments that they should defer gratification by devoting additional time to their formal schooling. However, the fact remains that upper-secondary schools could do much better in responding to the needs, interests and aptitudes of a significant number of young people and in adapting to the

accelerated pace of socio-economic and technological change. It is also unquestionable that education systems themselves, often the victims of their past success, bear considerable responsibility for some of the unfulfilled promises and high expectations they have raised in the broader society.

The present organisation of upper-secondary schools often in fact appears to be much more the result of marginal adjustments brought about by the need rapidly to expand provision rather than of clearly thought out initiatives that take account of the changing situation and composition of the 16-19 age group. It also results from the focus of educational reforms over the past decades and the traditional status and role of secondary education. During the post-war period of expansion, the attention of policy-makers and the main reforms undertaken focused primarily on the lower secondary level – consequent on the extension of compulsory schooling – and on higher education systems. Sandwiched between these two sectors with quite different but strong power bases, formal upper-secondary institutions very often developed in response to pressures and requirements stemming from the lower and higher layers of the education system, without sufficient consideration being given to goals and objectives germane to this level of schooling *per se*.

It would, however, be equally misleading to overstate this vulnerability of upper secondary institutions to outside pressures. There are few sectors of the formal system, particularly in European countries, that have such an entrenched power structure and are as resilient as the academic-type secondary schools or lines of study providing the main route to university entry. Moreover, in view of their strategic role in the selection and certification for entry into higher education, these schools exert an influence which clearly extends beyond their own boundaries.

Views about the extent to which the expansion of upper secondary education has merely led to providing "more of the same" have different connotations, depending on the traditional organisation and power structure of education systems in different countries. Where secondary education developed primarily as a direct extension of basic schooling, as has been typically the case in North America and in post-war Japan, upper-secondary schools adopted many of the features of "schools for children". This meant the adoption of similar teaching styles and classroom settings to those at the lower levels, maintaining the "pupil" as well as the "teacher" status, and above all, providing a rather uniform educational and socialising experience for the majority of the age group. Having achieved quasi-universal attendance, *basic schooling in these countries is by now associated with full secondary education;* thus the senior high school years in the United States and the upper-secondary education level in Japan essentially *represent the final stage of a continuum without major or sharp preceding breaking points.* It is worthy of note in this context that the distinction between compulsory and post-compulsory secondary education that has emerged in European countries is not a familiar one in the American scene where the traditional classification of primary, full secondary (high school) and higher education is largely maintained. In the United States, in contrast to the European situation, there are no major differences in the status and training of lower-secondary and upper-secondary teachers.

In most European Member countries, where historically the dominant function of secondary education has been the selection and preparation of a social and intellectual minority for university studies, the system has followed a somewhat different pattern of development. There was a general trend to introduce a sharp break between compulsory lower-secondary and post-compulsory upper-secondary education and to expand, without major changes, upper-secondary programmes. Such expanded programmes were primarily designed to meet the needs and interests of young people proceeding directly to higher education; they placed a strong emphasis on academic values and styles and thus were

ill-adapted to the growing numbers intending to complete their studies at this stage. The relatively low enrolment rates in full-time education in these countries, combined with a favourable employment situation and the existence of a strong vocationally-oriented sector, allowed upper-secondary schools to operate without major tensions. In the 1970s, however, this equilibrium was upset, forcing education authorities in most European countries to envisage major organisational and internal reforms at this level.

THE ISSUE OF POST-16 PROVISION

Sharper Boundaries between Lower-secondary and Upper-secondary Institutions

A first question brought to the fore as a result of rising participation rates in formal upper-secondary education is whether, and under what circumstances, separate post-15 or 16 educational institutions are to be set up. In a number of countries where mass upper-secondary school attendance has been achieved (Japan, Sweden, Norway, Denmark, France, Italy) separate provision is by now the predominant pattern. In others (Germany, Switzerland, Austria, Netherlands) traditional full secondary schools are largely favoured. In the majority of countries, however, different types of schools covering varying age ranges are quite common. While decisions in this area are clearly linked to the particular economic, administrative and regional circumstances of each country, prevailing viewpoints on broader educational and social issues are equally influential in determining the nature and pace of institutional changes. Support for separate post-16 provision, for example, is usually stronger among groups who advocate closer integration among different sectors of study and greater social mix of young people within larger, comprehensive-type upper-secondary institutions.

Not surprisingly, post-16 institutions and schemes are more common in the vocational sector than in general education. In the first place, this is the direct consequence of the move towards comprehensive lower-secondary education and the gradual phasing out of vocational programmes at this level. Secondly, since the traditional model of full secondary education is deeply rooted in the academic-type schools and lines of study, it is primarily within this sector that there is strong opposition both towards a sharp break between lower and upper-secondary education and to closer integration with other types of upper-secondary programmes. As a result, quite a common pattern in the OECD area is the coexistence of full general secondary schools covering a wider age range, namely 11/12 to 18/19 years together with post-16 vocational schools. The new Dutch Bill for the reform of upper-secondary education proposes this type of combined model, even though the original plans envisaged separate post-16 provision for *all* lines of study.

It is worth noting that debates on this topic pay relatively little attention to the educational and social implications of developing organisational settings which encourage an increased age segregation of young people. Already in the mid-1970s, the Coleman report[2] highlighted some of the drawbacks in the United States resulting from both the growing isolation of youngsters from adults and from increased differentiation of the young in narrowly-defined age groups. In addition to the limited opportunities of communication between young people and adults (except teachers) there are decreasing chances for children and adolescents of different age groups to interact and learn from each other, to share common experiences and assume mutual responsibilities – a significant lack in any socialisation process which is also supposed to take account of future family responsibilities

and parenthood. The key role that older teenagers are known to play in the educational experience of their younger peers suggests that separate upper-secondary schools may have particularly adverse effects for pupils in lower-secondary education. However, results of research in this area are by no means conclusive; and there is also evidence of the positive results achieved by separate organisational arrangements for younger adolescents. Many school heads and teachers claim that the absence of older groups gives more chances to the 12 to 15 year-olds to develop initiative, leadership and greater responsibilities.

Little is known also about the impact of separate provision on participation, performance and satisfaction of older adolescents. In the United Kingdom, where there are various types of schools covering different age ranges, a recent study has shown that the development of post-16 colleges has contributed to raise levels of participation[3]. Increased participation in Further Education Colleges offering the same courses as traditional schools where enrolments stagnate is also taken as an indication of growing preference among older adolescents for greater flexibility in modes of attendance and a more adult type of educational setting. A recent study in Australia[4] similarly concluded that the establishment of separate secondary colleges to cater for school years 11 and 12 (final years of secondary education) in the Capital Territory appeared to give rise to increased student satisfaction.

Added support for a sharper break and separate institutional arrangements for lower- and upper-secondary education is given by the concern to relieve lower-secondary education of its selective function, and by the view that, with its growing numbers, the upper-secondary level needs to define its specific and distinctive functions and be given sufficient autonomy to attain them. So does the belief that post-16 colleges, less subject to the typical school pressures and constraints, have greater chances of developing a type of organisation, climate and teaching relationship which better corresponds to the needs and circumstances of older adolescents.

If, as appears to be the case, post-16 educational institutions are likely to become the prevailing pattern of provision in the years to come, the social and psychological implications of isolating a rather narrowly-defined age group would merit special attention – not least in order to palliate some of the possible negative or unintended consequences.

The Blurred Boundaries between Secondary and Higher Education: Towards a New Type of Post-compulsory Institution?

Problems related to age segregation and the constraints imposed by rigid distinctions by levels of education are also posed at the top end of the upper-secondary stage. The question here is whether greater impetus should be given to the development of post-16 colleges which at the same time cater for older groups; more particularly, whether such colleges could also offer programmes and qualifications beyond the traditional secondary level. Institutions and schemes of this type already exist in a number of Member countries. Japan, Germany, Finland, Norway, Sweden have some secondary technical lines of study that are of longer duration and grant qualifications at a more advanced level than the typical secondary school programmes. Further Education Colleges in the United Kingdom, TAFE in Australia, the *Lycées techniques* in France offer both secondary and post-secondary programmes, usually enabling students to continue their studies in the same technical branch. Most often they allow for greater flexibility in teaching arrangements and patterns of attendance, part-time, block release and participation of adults. Many other examples could be quoted, but in the majority of countries these types of arrangement are found on a rather small scale and predominantly in the technical vocational sector.

It is in the United States and in some Canadian provinces that developments in the mainstream of formal education have rapidly led to a far greater mix of age groups and to blurring or shifting the boundaries between secondary and higher education. The CEGEPs *(Collèges d'enseignement général et professionnel)* in Quebec represent an interesting example of a new type of educational institution with an intermediary status between secondary and higher education. They cater for all young people who remain in the formal system beyond the secondary level, that is, after 11 years of primary and secondary education. They offer two-year programmes preparing for university entry (completion of this programme is a formal prerequisite for all those seeking admission to universities) and two/three-year courses leading to middle-level vocational qualifications. Although in terms of initial education CEGEPs fulfill equivalent functions to the European upper-secondary schools, the fact that they are formally considered as post-school institutions and that they are open to a far wider age range has enabled them to develop a more adult atmosphere, greater openness to the community and closer contacts with the world of work.

Community colleges in the United States, although formally at the post-secondary level, also offer programmes which cut across the secondary/post-secondary boundaries. Significant in this respect is the massive involvement of these colleges in remedial education, a phenomenon often referred to as the "secondarisation" of tertiary level institutions. It is estimated that around 35 per cent of new entrants to all post-secondary institutions in the United States take remedial courses corresponding to a high school or even elementary level, the large bulk concentrated within Community Colleges[5]. On the other side of the borderline there are similar signs of an overlap of functions across levels: a third of United States secondary schools report that they offer college-level courses; more than half claim having students who are eligible to enrol simultaneously in courses at nearby post-secondary colleges. Such options and arrangements enabling students to accelerate their studies are possible given the existence of a variety of external examination boards and testing services which assess students' aptitudes and achievement. Results are passed to the higher education institution the student plans to attend and it decides on the number of credits to be awarded. In May 1982, 141 626 advanced-placement examinations were arranged by the Educational Testing Service in order to grant college or university credits[6].

The development of post-compulsory community-type colleges that straddle both levels of education could be an attractive alternative for countries which now witness rapid expansion at the upper-secondary level but do not plan, or do not have the capacity or resources, to develop more open and diverse higher education institutions for the growing number of qualified secondary school leavers.

Indeed, in many Member countries, there is already clear evidence of a shortage of further education and training options for students from academic and technical secondary lines of study, particularly in terms of short, professionally-oriented courses. In Germany the number of young people with an *Abitur* who enrol in apprenticeship schemes rose from a few thousands in the mid-1970s to around 60 000 in early 1983. A significant number, however, enrol in universities or higher technical colleges *(Fachhochschulen)* after going through apprenticeship. The increase in the competition for entry into French IUTs *(Instituts universitaires de technologie)* is similarly a sign of unsatisfied demand for short-cycle post-secondary studies.

Changes in the choices and the career paths of many academic secondary school leavers are already posing serious problems for groups lower down the educational ladder. In spite of efforts aimed at avoiding an upward institutional "drift", many of the programmes or schemes where qualified school leavers are heavily represented gradually tend to change their orientation and admission/selection criteria, thus displacing and blocking opportunities for

their original clientele, i.e. young people coming from compulsory education or from vocational secondary courses.

The development of post-compulsory or tertiary *colleges*, offering more varied programmes of different duration for a broader age group, could allow for expanded education/training provision for young adults in their early twenties for whom employment prospects are on the decline, possibly at a lower cost than in established higher education institutions, and in a milieu less likely to be imbued with academic values. Such a type of institution could also contribute to expanded education and training programmes leading to middle-level qualifications, and thus fill the vacuum resulting from the excessive polarisation of the structure of output of many education systems discussed in the previous chapter. One of the main objectives of the 1984 Swedish Government Bill on the reform of upper-secondary education is the development of new courses – labelled advanced studies – to follow on after the completion of upper-secondary school and seen as alternatives to higher education, or preceding it. They will be designed to enable students coming from the three-year lines of study (mainly general education) to acquire vocational qualifications and for those from two-year vocational lines to pursue a further specialisation or preparation for entry into higher education. The majority of these courses are to be provided in upper-secondary schools.

Finally, such a model may provide a partial solution to the problem of age segregation, both by including more cohorts of young people and by blurring the boundaries between youth and adults. The extraordinary increase of mature students in this type of college over the past decade clearly shows that they represent a more attractive setting for adults than the typical upper-secondary school, and at the same time have greater potential to serve as a key educational resource for the surrounding community. These are relevant considerations for the development of policies aimed at promoting continuing or recurrent education since it can be reasonably argued that it will be primarily at this level – in between upper-secondary and post-secondary – where the bulk of the adult demand will have to be met.

The problems posed by the creation of institutions that entail a greater mix of courses and age groups, however, must also be borne in mind. Recent experience in Australia with the creation of community colleges in Tasmania is interesting in this respect. "These community colleges tried to combine within one institutional complex the functions of upper-secondary education, adult education, and technical education. A high degree of cooperation was envisaged in the use of educational resources, with substantial flexibility and choice for students in the selection of courses, including the mixing of academic and technical subjects. The innovation broke down because of administrative and internal conflict concerning the different terms and conditions of appointment of general secondary and technical teachers"[7]. This example provides a good entry point into a more general discussion on the issue of institutional integration.

INTEGRATED OR SPECIALISED UPPER-SECONDARY INSTITUTIONS?

Questions relating to the nature and degree of integration of different sectors and programmes of study have for many years been one of the central topics of debates on reforms at the lower-secondary level. They now figure prominently in policy discussions on the organisation of post-compulsory secondary education. We have already discussed some of the questions confronted at the overall system level (total education and training provision for the 16 year-olds); here we will focus on policies and practices concerning organisational arrangements within the formal schooling sector.

As with other areas of education, up to some years ago one of the guiding principles for the expansion of upper-secondary systems in the majority of Member countries was the closer integration of the options provided within larger and more comprehensive institutions. Social factors and, in particular, equity considerations provided the main rationale for advocating a greater homogeneity of schools and the setting up of larger and more polyvalent institutions aiming at promoting the social mix of young people and reducing hierarchical distinctions among the programmes provided. This pattern of development was sustained by the prevailing confidence in the schooling model, as evidenced by policies favouring the move from enterprise-to school-based vocational education, and the political will to enlarge and modify the social composition of the pool of applicants to higher education.

By the late 1970s, with the changed socio-economic climate, support for this move began to wane. Wide quantitative and structural differences among upper-secondary systems of the OECD regions of course persisted, so the discussion was quite strongly influenced by the degree and types of integration already achieved within each national context.

Not surprisingly, it is in the United States, with very high participation rates and the most advanced forms of integration, that certain features of the comprehensive high school have for some years been under strong criticism. At present, 90 per cent of all American high schools enrolling around 80 per cent of the age group attending secondary education are labelled "comprehensive". They cater for all young people in a given catchment area and typically offer three broad curriculum choices: academic or college preparatory (around 39 per cent of all students); vocational (24 per cent); and general (37 per cent)[8]. Formally at least, all pupils take a common set of core subjects and, although elective courses often represent more than 50 per cent of the total programmes, schools or the states in which they are located, award a single type of leaving qualification: the high school diploma.

In the 1970s, the focus of criticism was on the lack of choice and diversity resulting from the quasi-monopoly of the comprehensive high school within total provision at the secondary level. At the time, public dissatisfaction gave rise to a significant move in favour of *alternative schools*. Local communities and independent groups took the initiative in developing new types of educational institutions or independently sponsored schemes aimed at providing greater choice and diversity within a given catchment area.

These alternative schools favoured greater specialisation in certain academic or artistic subjects and in vocational studies, promoted pedagogical innovations and, in certain cases, aimed at establishing closer contacts with the world of work. By the early 1980s, support for this trend seems to have waned. Changes in the political climate, scarcity of resources, controversial evidence about the results achieved by many of these schools, no doubt have been contributing factors. Moreover, growing anxiety about the continuous deterioration of the quality of high schools and the awareness that alternative models serve relatively small numbers (and thus allow for only marginal adjustments), have caused attention to be focused on measures and solutions aimed at dealing more directly with the problems of comprehensive high schools rather than on those designed to circumvent them. It is of interest that none of the major recent reports[9] containing highly critical assessments of the present situation of American secondary education explicitly question the public comprehensive school model. Several of them suggest setting up "schools within schools" but none seems to favour the systematic creation of parallel or alternative arrangements.

Whether the degree and type of uniformity across the system brought about by the dominance of the comprehensive school pattern is to be seen largely as a positive development, and whether indeed there is in the United States greater uniformity of provision now than two decades ago is a controversial and unsettled question. In the light of current criticisms it could be said that the generalisation of comprehensive high schools reflects a policy approach that

favours diversity *within* rather than *among* institutions. On the one hand, such an approach may have undermined choice and diversity which different types of organisational settings could make possible. This concern is also largely reflected in the strong political forces in favour of maintaining or enlarging the private sector. On the other hand, one of the strongest criticisms now being voiced is the excessive diversity within schools brought about by the vast array of elective courses offered for credit and taken by students in a disparate manner.

Finally, it should be noted that policies aimed at a formal standardisation of provision are inevitably countered by pressures or strategies promoting other, perhaps more subtle but no less significant, forms of differentiation. Few would question the overwhelming differences in quality among individual comprehensive high schools in the United States. The immense efforts and progress accomplished in bringing to the senior high school years substantial numbers of young people from less privileged groups have inevitably led to a steep hierarchy of secondary schools. There is little in common between the richly-endowed private or public schools closely articulated with the top-ranking colleges and universities and those located in inner city ghettos and areas where minority groups are largely concentrated. This again points to the dangers of any general diagnosis concerning the current situation of American high schools; it also stresses the complexity and some of the limitations of measures taken within formal education systems which aim at coping with such major social issues as equality and racial integration.

In terms of size, structure and functions of upper-secondary education, Japan is the OECD country which bears closest resemblance to the North American pattern of provision and correspondingly faces a number of similar problems. With 94 per cent of the age group enrolled, 60 per cent in general and 30 per cent in vocational upper-secondary schools, a highly structured common core curriculum in each sector and a single type of qualification sanctioning the end of secondary education, the Japanese upper-secondary system can be said to have a relative high degree of organisational as well as internal (curricula) integration.

Differences among general upper-secondary schools in Japan are primarily in terms of prestige and quality, and in spite of the existence of a strong private sector (in 1980 28 per cent of young people attended private schools, some with high tuition fees), all of them follow a uniform course programme of studies, organised in conformity to detailed guidelines issued by the central education authorities and regional Boards of Education. As in the United States, issues relating to quality and the school climate (e.g. violence, apathy) are currently of prime concern but the model of integrated general upper-secondary school is not basically questioned. In clear contrast to the United States, however, current policy is towards promoting internal diversity and flexibility of provision. Recent government guidelines for the reform of upper-secondary studies[10] prescribe greater school autonomy in the organisation and implementation of curricula, a reduction in the number of compulsory subjects and a corresponding increase in optional courses and credits and greater flexibility in teaching hours. Of particular interest is the provision made for the organisation of classes according to "learning maturity", especially in key subjects such as mathematics and foreign languages. This has become a highly controversial issue in Japan because some groups perceive this provision as a disguised form of official support for education "segregated" according to ability. Whether or not it will be possible to develop a distinct concept of learning maturity not equated to ability remains to be seen. It is significant, however, that having rapidly achieved quasi-universal attendance within a highly homogeneous formal upper-secondary system, pressures for greater differentiation have emerged rather forcefully: by 1978, 15 per cent of public upper-secondary schools had adopted this system of class differentiation on the basis of learning maturity, a proportion that increased to 33 per cent in 1982.

As will be discussed in greater detail in the following chapter, current emphasis on

greater uniformity of school programmes in the United States and on increased diversity in Japan point to the perennial difficulty, experienced by all countries, of striking an adequate balance between providing a basic common education and socialisation experience to as many youngsters as possible, while at the same time ensuring diversity in response to the needs and interests of individual pupils, the requirements of the labour market and those of the higher layers of the system.

Developments in the 1960s led many observers to believe that at least some European countries would eventually adopt a model of secondary school similar to the North American high schools. This prospect seems by now very unlikely. Changes in prognosis can be partially accounted for by past trends in underestimating quite significant and deep-rooted cross-Atlantic differences in the structures and functions of secondary systems[11]. But it is also the case that some distinctive organisational features of European upper-secondary education, such as the wider age coverage and a strong technical/vocational sector, have shown their value in coping with the changing economic and employment situation as well as with the new groups entering this level.

Thus, even those European countries such as Sweden, and to a lesser extent Norway, which consider integration of general technical and vocational education as one of the main policy guidelines for the development of upper-secondary education, do not envisage introducing a common core curriculum – or a common secondary school qualification for the bulk of the age group. This pattern has indeed been adopted at the lower-secondary level; at the upper-secondary stage integration is primarily understood as the coexistence within an institution of clearly defined and rather highly structured lines or sectors of study, each leading to different types of qualification. The development of integrated upper-secondary schools serving all young people within a given catchment area is, therefore, not viewed as incompatible with curriculum differentiation and specialisation at this level. On the contrary, those advocating closer organisational integration see it as a strategy to give full upper-secondary status to all options – in particular in the vocational sector – since common provision is aimed at attenuating hierarchical and status differences among programmes, facilitating transfer between courses, and bridging the gap between the education and training fields.

At present, there is such a wide range of upper-secondary systems and types of school within the European OECD area – including significant regional differences within each country – that any attempt to categorise prevailing patterns inevitably leads to broad generalisations. Still, it can be said that in the 1960s and 1970s most Western European countries aimed at broadening the scope of formal upper-secondary systems so as to include, in addition to the traditional lines of study, long-cycle technical programmes and, to a varying degree, vocational schools. Efforts focused particularly at bringing technical education to a par with academic lines of study, partly at least to divert the excessive demand for general upper-secondary education.

Changes in entry criteria and in the curricula of technical schools, the right awarded to their graduates to qualify for entry into higher education, their inclusion together with academic-type courses in the same administrative framework, did indeed raise the status of technical education within education systems and narrowed the social distance between the two sectors, although often to a lesser extent than was originally foreseen. The strong concern to meet higher education standards led the technical sector to emphasize preparation for further studies and to neglect employment requirements, thus creating a new set of problems. Interestingly enough, even at the time when the comprehensive principle received strong support, very seldom did reforms lead to the inclusion of technical and general programmes within the same institution. This occurred to some extent in the social and economic areas of

study; but the predominant pattern continues to be that of separate provision, in particular for industry-based technical courses. Thus, at the grass root level, links and communication between students and teachers in the two sectors are less frequent than is often suggested in policy statements. A notable exception is found in Sweden, where a major reform of upper secondary education in the early 1970s specifically aimed at integrating all lines of study, including short vocational courses, within the new gymnasium schools. But even there, the original impetus in phasing out specialised vocational schools has declined considerably in recent years. A similar, although less radical, policy was pursued in Norway with the reform of upper-secondary education of the mid-1970s.

In the early 1980s, with governments' attention focused on raising the attractiveness and quality of vocational education, a number of issues and dilemmas have arisen similar to those faced with technical studies fifteen years ago. Changes in the socio-economic context, and concern for maintaining the employment value of these courses suggest, however, that policies will differ considerably from those adopted in the past.

In terms of schooling arrangements, as already mentioned, the current climate in European countries seems to be one of quite strong scepticism vis-à-vis the development of polyvalent upper-secondary institutions offering general, technical and vocational courses, even where it is understood that these programmes remain separately organised and have clearly distinct orientations. The strong opposition to such coexistence from academic quarters is shared by many representatives of the vocational training and employment sectors: concerns about the effects of a more heterogeneous and diversified setting on the quality and prestige of academic programmes are matched by equally strong misgivings about the fate of vocational programmes offered within environments dominated by the norms, life styles and values of academic education.

Pressures from interest groups representing different sectors of education and training are not the only reasons behind the current climate in favour of specialised institutions. In this respect, it is important to note that support for different types of school implies maintaining a certain status quo; and there is considerable consensus (particularly among governments of advanced countries) in favour of reforms within the established school network without major institutional changes. Financial constraints, shrinking cohorts and uncertainties about demand no doubt play an influential role in this context. It is also evident that in recent years a change in ideas and priorities guiding the development of secondary education has taken place. After the cycle of expansion and of emphasis on equality and confidence in the comprehensive principle as a basis for attaining these goals, a new cycle of organisational consolidation has started with a reordering of priorities and, in certain cases, with a definite swing of the pendulum in the opposite direction. Emphasis on maintaining different types of school (the motto: "equivalent but separate") also reflects a concern for underscoring the differences between the aims of education and training at the upper-secondary level and at the end of basic compulsory schooling: less emphasis on a common education and socialisation process, and more on generating genuinely different alternatives to the established programmes which can develop their own concepts of curricula, standards and quality. Maybe this is a necessary stage in the development of more broadly-based upper-secondary systems and once the new partners (vocational schools) are given the opportunity of defining their distinctive tasks and purposes and of consolidating their position, closer coexistence could be easier and with less risks of subordination. In the meantime, efforts focus on establishing more regular and systematic links among different institutions, particularly in terms of administrative coordination, and in promoting greater student mobility among specialised programmes and schools (see Chapter V). Even more significant, but by no means easier, are

the attempts to bridge the gap through curricula reforms in both general and vocational schools (see Chapter IV).

It is difficult to foresee developments in a longer-term perspective. Clearly this stage of education and training is under strong pressure to change, and if upper-secondary systems are to play a leading role in providing for the bulk of the 16 to 19 year-olds by the turn of the decade the institutional network at this level will have to be substantially different from what it is now.

In conclusion, reference can be made to the argument mentioned earlier, namely that in the coming years many European countries will be under strong pressure to develop a new type of post-compulsory institution combining elements of the Australian and the British Further Education and Tertiary Colleges, of North American Community Colleges and of more traditional European adult and secondary schools. The main characteristic of this type of institution would be its greater openness and flexibility as well as a stronger "consumer" orientation which would imply:

- participation of students of different age groups;
- organisation of studies and programmes geared to specific individual demands and qualifications;
- diversity in modes of attendance;
- diminished concern for the traditional differentiation between formal secondary and post-secondary or higher education;
- closer partnership with other education and training centres as well as with agencies or enterprises requesting their services.

Whether this can be achieved on the basis of reforms of existing institutions or will require the creation of new, quite different, organisational arrangements will depend to a large extent on the capacity of present upper-secondary schools and colleges to overcome many of the rigidities and constraints which at present characterise their internal organisation. A measure of "de-schooling" or de-institutionalisation of current provision in formal upper-secondary systems appears to be called for if such systems are to assume leadership in responding to new education and training needs.

ISSUES AND DILEMMAS

The problems upper-secondary schools face in their attempts to adapt to the accelerated pace of societal changes are both varied and complex and are also linked to a wide range of external and internal circumstances which cannot be discussed here in any detail. What we can do, however, is to pinpoint some of the main difficulties in bringing about institutional changes and a few of the many dilemmas underlying decisions concerning the nature and direction of organisational reforms in the years ahead.

In the first place, it should be recalled that schools and colleges are part of greatly expanded systems of education, with heavy bureaucratic machineries and complex structures of administration, involving different types and levels of formal authority and less formal, but strongly influential interest groups. The importance education has acquired in the political arena has also made it more susceptible to growing pressures from other established bodies, in particular the legislature, professional groups, unions, and parents associations. The need to comply with the flood of laws, rules and regulations with which schools are inundated, and to account for such compliance, has inevitably influenced the way in which schools operate. This

increased administrative load has led to a corresponding increase in the number and power of administrators and civil servants at all levels; it has also encouraged a trend to put more emphasis on quantifiable and visible indicators of performance, leading in general to an even stronger formalisation of education within the formal system. Frequent criticisms of schools for their "resistance or incapacity to change" often underestimate the difficulties they have in implementing reforms, under the weight of these formal procedures and the influence of power conflicts taking place largely outside their established ambit.

Concern to reduce the rigidities imposed by centrally organised bureaucracies has given impetus to policies in favour of decentralisation and greater institutional autonomy. Locally controlled schools have many advantages, but it is by no means evident that they are better protected from the burdens of bureaucracy. The experience of the United States[12], for example, shows that in the absence of strong federal control the vacuum is filled by other bodies – in this particular case the state and the legislature – which, although fulfilling a necessary role, tend to become equally constraining. There are similar examples in European countries where decentralisation has led to a shift of power from central to local authorities – often resulting in excessive influence of local political bodies – without this automatically entailing greater autonomy or less administrative constraints for individual institutions

Institutional autonomy has in fact become an extremely sensitive political issue, as the problems resulting from greater bureaucracy and government control over schools have fuelled arguments in favour of market forces playing a greater role in educational provision. Indeed, many among those who advocate a high degree of institutional autonomy see it now primarily as a strategy towards greater plurality in sources of control and diversity in schooling arrangements, and as a means of promoting competition among schools. Increasingly it is also seen as a means for developing private education. This, in turn, has led to a more cautious attitude among those who support a relatively high measure of autonomy but who fear the inherent dangers, particularly the negative social consequences of growing disparities and widening quality differences among schools.

Whatever the future trends, it is clear that the public-service nature of educational provision at this level will be preserved and that public authorities will in consequence continue to have major responsibility for it. They are therefore faced with the challenge of developing mechanisms of control and types of management which encourage greater flexibility in the internal organisation of schools as a basis for the effective discharge of their primary purpose, which is meeting the educational need of their diversified clientele.

Increased rigidity and formalisation of the educational process result also from recent trends in developing large secondary schools, catering for hundreds, if not thousands, of young people. This has been particularly the case in North America, Japan and in Scandinavia, but has also characterised the development of schools in urban areas in many other Member countries. Concern with school size derives both from accrued management problems and the strong influence it has on the milieu, atmosphere and ethos of individual institutions. As aptly summarised in a recent article:

> "... the price paid for size is paid in the field of social education. The bigger the school, the more it suffers from impersonal formality. When the informal face-to-face social control that can be exercised in the small school breaks down, then all kinds of formal controls, which require an elaborate system of formal rules backed up by increasing administrative machinery, have to be substituted. Students in the large, consolidated, centrally located schools have to be transported long distances. The social climate easily becomes influenced by lack of stable relationships between the students and the school staff. Truancy, vandalism, and harassment thrive in a social climate where direct social control

is replaced by a system of formal regulations which can be violated by students without having to suffer the embarrassment and shame which is inevitable in a small setting."[13]

Similar concerns are expressed in recent reports on the situation of secondary schools in the United States and in France. The American report suggests a reorganisation of schools into smaller units, "schools within schools", when they enrol more than 1 500 to 2 000 students[14]. About half of the United States high schools enrol more than 600 students. The French report[15] proposes a top limit of 900 students per school (65 per cent of the *Lycées d'enseignement général et technique* and 19 per cent of the *Lycées d'enseignement professionnel* have over 600 students) and also a different management structure for schools with more than 600 enrolled.

Growing concern about the lack of interpersonal relationships and the renewed interest in developing a school climate likely to decrease feelings of anonymity and alienation illustrate some of the central dilemmas confronting the organisation of upper-secondary institutions. On the one hand, such considerations call for a more protected and structured environment, with emphasis on coherent and stable groups contributing to a sense of community and common socialisation. On the other hand, with growth, diversity and maturity of the student body, there are equally strong claims for greater openness, freedom of choice and flexibility in modes and patterns of attendance; in other words, for a milieu in which the *status pupilari* of older adolescents, and in consequence the socialisation role of institutions, will be reduced.

This dilemma points to the many tensions and conflicts with which upper-secondary schools will have to cope as they become *transition* institutions for the bulk, if not the majority, of the 16 to 18 age group. The difficulties in this respect stem from the variety and uncertainty of destinations, both in terms of further studies and the world of work, and are compounded by the different concepts and levels of maturity related to the personal and social characteristics of young people.

Finally, upper-secondary schools have always emphasized their role in preparing young people for further studies as distinct from direct entry into the world of work – and they have been better at it. Under the far greater external constraints now prevailing, it will be extremely difficult for them quickly to initiate the radical changes needed to perform this transition function effectively for a far greater number of young people. Moreover, schools cannot be expected to do this job alone. Training for various social roles, providing for transition to adulthood and to employment, require by definition a variety of experiences which no single setting can provide; much less one where the teaching force itself has had scarce experience outside formal education. It seems incongruous and self-defeating to require schools to substitute for the family, the community or the workplace in preparing for adult life. For this they are quite inadequately equipped, particularly as one of their main missions is to teach precisely what other institutions or life experiences cannot, or do not, usually provide.

Few would dispute the need, indeed the urgency, of internal reforms aimed at breaking the excessive isolation of schools. Such reforms, however, cannot be meaningfully undertaken without some prior clarification of the concepts which should guide the division of labour between schools and other institutions. Such clarification becomes, in turn, the essential condition in developing a closer partnership between schools and other agencies of the surrounding community, so that young people are given more opportunities to combine schooling with other education, training and work activities.

Clear trends towards the development of such partnerships have been evident over the past years, as seen in the far greater variety of schemes involving alternation, cooperative education, traineeships and the like. However, the lack of traditional openings in training and

in the workplace resulting from the deteriorating labour market are exerting additional pressures on schools to increase its contribution particularly in facilitating the transition to work. The need for additional measures is, indeed, felt in many countries, and a variety of pilot experiments and innovations are being carried out, in particular at the local and community levels. Many of these have been highly successful, but they reach only a very small number of young people. Young people themselves are being encouraged to take greater initiative in finding traineeships or jobs on their own; but, of course, those most in need are usually the ones who face the greatest difficulties in finding these opportunities.

More recently some countries (notably Sweden, France and Portugal) have shown renewed interest in organising youth service and community based activities on a larger scale. The report of the Carnegie Foundation on American High Schools[16] proposes the introduction of a scheme by which credits are awarded to high school students who invest no less than 30 hours per year and a total of 120 hours over the four high school years in service activities of all types.

In all this, what stands out most, perhaps, is that underlying the ongoing search for greater openness and responsiveness of schools to pressing societal requirements, there is a shared public concern that new measures in favour of alternation, combined work/study schemes, youth service and the like should not detract them from fulfilling their essential task of instruction in basic disciplines and communication skills. This is all the more important, since it is still primarily in this field that schools can make their most valuable contribution both to young people and to society.

NOTES AND REFERENCES

1. "The Role of Education and Training in relation to the Employment and Unemployment of Young People. Statement by the Education Committee", OECD, Paris, 1983 (document).
2. J. Coleman *et al., Youth: Transition to Adulthood.* Report of the Panel on Youth of the President's Science Advisory Committee, University of Chicago Press, 1974.
3. *Education for 16-19 year-olds*; A review undertaken for the government and the LEA Associations, HMSO, London, 1981, p. 30.
4. D. Anderson *et al., Schools to Grow In: An Evaluation of Secondary Colleges,* Australian National University Press, Canberra, 1980.
5. Carol Stocking, "The Links Between Secondary and Higher Education in the United States", in *The School and the University : An International Perspective,* unpublished manuscript from the Comparative Higher Education Research Group, University of California, Los Angeles.
6. E. Boyer, *High School. A Report on Secondary Education in America,* Harper and Row, New York, 1983, p.255.
7. Department of Education and Youth Affairs, Youth Policies, Programs and Issues, Australia Government Publishing Office, Canberra, 1983, p. 52.
8. *A Capsule Description of High School Students,* National Center for Education Statistics, Washington, April 1981.
9. See for example; The National Commission on Excellence in Education. *A Nation at Risk: The Imperative for Educational Reform,* U.S. Government Printing Office, Washington, 1983. E. Boyer, *High School: A Report on Secondary School in America, op. cit.*
10. Ministry of Education, Science and Culture: *Course of Study for Upper Secondary Schools in Japan,* Tokyo, February 1983.
11. *Policies for Higher Education in the 1980s,* OECD, Paris, 1983, Part II, Chapter 1.
12. E. Boyer, *op.cit.*
13. T. Husén, "Present Trends in Education", in *Prospects,* Vol. XII, n°1, 1982.
14. E. Boyer, *op.cit,* p. 235.
15. *Les lycées et leurs études: Au seuil du XXIe siècle.* Rapport du Groupe de travail national sur les seconds cycles, présidé par M. Antoine Prost, ministère de l'Education nationale, Paris, 1983.
16. E. Boyer, *op.cit.*, pp. 209-215.

Chapter IV

ORGANISATION AND CONTENT OF STUDIES

Many national reports and studies speak of the need to re-define the relationship between general and vocational education at the post-compulsory stage. The distinction between general and vocational education is not, of course, a clear-cut one. Newer and less academic forms of general education are emerging in some countries, and there are important developments in vocational education, including the introduction of pre-vocational (mainly off-the-job) and sub-apprenticeship (mainly on-the-job) training. And in all countries there exists, whether formally labelled or not, a technical education stream which has some of the characteristics of both general and vocational education, and may provide both a conceptual and practical bridge between them. Nevertheless, the distinction between general and vocational is a useful point of departure for any discussion of the curriculum at the post-compulsory stage.

THE CONTENT OF GENERAL EDUCATION

Three main models of general education can be identified in the OECD countries. The *academic model* is found in the English interpretation of the Greek concept of liberal education, the French notion of *culture générale*, and the German concept of *Allgemeinbildung*[1]. In each case, the academic model has had as a primary function preparation for university. It emphasizes the importance of the structure of knowledge, either in terms of a small number of broad conceptual fields, or in a larger number of existing "disciplines", and lays considerable stress on the intrinsic value of the content and on transfer of learning. In this view, the boundaries between subjects, or between education and "life" are not artificial impediments to learning, but the precondition of focused analysis and understanding. And despite the fact that such general education is effectively functional in that it prepares for higher education – which may lead on to employment in research, teaching, the professions or elsewhere – the rationale for it has always stressed the intrinsic value of such an education in terms of "learning to think" or the formation of character.

A second, *pragmatist model* of general education is found above all in the United States, though its influence has spread to other countries in recent decades. The emphasis in this model is on relevance, experience, problem-centred teaching and "education for life". Historically, thinkers such as Rousseau, Froebel and Dewey have contributed to the various strands in the pragmatist perspective, as did behaviourist psychologists such as Thorndike, who advocated a "direct" curriculum rather than an "indirect" one which relied on general

transfer of learning. "Soft" and "hard" variants of the pragmatic model can be distinguished: the soft variant is illustrated by such terms as "life adjustment education", "learning experiences", "self-realisation", and "personal growth", whereas the hard variant emphasizes measurable, useful skills and competences. In both cases, the effect on curriculum policy is to decrease the importance of a common core in favour of optional units or modules, chosen on the basis of interest, need or usefulness. Critics of the pragmatist model attack the resulting "cafeteria curriculum" as lacking in coherence or rigour, and also the sometimes superficial interpretation of the word "activity". Another fundamental objection is that knowledge does not always derive from real-life problems, but may grow out of relatively autonomous, theoretical or conceptual activity. However, the pragmatic perspective has tended to reduce the inequality in status between "pure" and "applied" knowledge, theory and practice. As such, it does appear to modify one aspect at least of the distinction between general and vocational education.

The third, *polytechnic*, model of general education is associated with Eastern European countries, though there is nothing exclusively Marxist in the idea of the educative value of work and work experience. Indeed, this belief has often been expressed by businessmen and industrialists who are sceptical of the value of "ivory-tower" education, or by populist thinkers such as Grundtvig. In principle, polytechnic education would seem to form a natural bridge between general and vocational education, at a theoretical level through the concept of praxis, and at a practical level by allowing the concurrence or alternation of study and work. It should be noted, however, that polytechnic education in Eastern Europe is associated with compulsory, rather than post-compulsory education, and in fact the "polytechnical" components of general education coexist in practice with a rather "academic" general education curriculum. Moreover, there have been considerable practical problems in making normal work experience genuinely educative; indeed, it has been found necessary to set up special polytechnic centres in East Germany for this purpose. Thirdly, the polytechnic model has not had a major influence on policy in OECD countries, except in Yugoslavia and in parts of Scandinavia where it has expressed itself in an emphasis on work experience, both as an element in the curriculum and a condition of access.

Of course, the pattern of upper-secondary general education by no means always conforms exactly with one of these three models. The proposed reforms of the general stream in Japan, for example, have elements of both the academic and the pragmatic. Nevertheless, there is considerable stability in the pattern in many countries; this is due partly to the weight of tradition attaching to upper-secondary certificates *(Baccalauréat, Abitur, Maturità)* and partly to the close links between upper-secondary and higher education, which makes it difficult for either to change on their own.

How far are these traditional models being modified by current trends? There seem to be various pressures, some of them conflicting. In countries such as the United States, where there is concern about falling standards in secondary and higher education, the formal, academic aspects of general education are being re-emphasized. In the United Kingdom, tougher competition for access to higher education is likely to have the same effect, squeezing the general studies element, and placing even more stress on A-level performance. On the other hand (as in some continental European countries and Australia) declining transfer rates to higher education, and the inability of many of those who do not transfer to get employment, raise questions about the suitability of the academic model for a larger and less academically inclined group of students. A similar pressure for a less academic and more relevant or student-centred model in Japan has led to proposals for a smaller core curriculum, and a greater number of options. In Sweden, a recent proposal to require a certain amount of work experience in general education lines of study suggests a continuing commitment to

comprehensive principles, despite counter-pressures from higher education. Special programmes for the so-called "risk groups" exist in many countries; some of these aim at building motivation, self-reliance and confidence rather than following the traditional approaches of general or vocational education[2].

Such trends suggest that, in some OECD countries at least, the pattern of general education is being re-defined. Four different dimensions can be identified in this. First, general education can be defined in terms of knowledge, i.e. the range of subjects or types of knowledge covered. This tends to produce the more academic models of general education (familiar, for example, in continental Europe) which emphasize exposure to the arts, social sciences, natural sciences and mathematics, and form a natural preparation for higher education. Secondly, general education can be defined in terms of society, since it prepares students for adult life in their particular culture[3]. This can lead to an emphasis on, for example, social relations, health, work, money, and citizenship: topics that would not usually figure in a more knowledge-oriented definition of general education. Thirdly, an education may be defined as general if it develops the full range of abilities that a person can have: not only cognitive, but also artistic, manual, physical and inter-personal[4]. Schools are often criticised for concentrating on the cognitive-intellectual skills, and ignoring or downgrading the others, although it is arguable that cognitive skills to some extent underpin all the others. Fourthly, education may be described as general if it exposes students to an adequate range of learning processes and environments. The variety of content in many school curricula contrasts with the uniformity of the teaching-learning process, and hence non-traditional methods (e.g. project work) and out-of-school experiences (including work placements) can be justified in terms of providing a wider or more representative range of role models, learning processes and situations.

These four definitions of general education – in terms of knowledge, society, ability and process – are in themselves problematic, and one can argue that they are not completely distinct, or that one is more fundamental than the others. However, they do provide a framework for analysing current trends. In the United States, for example, there are forces advocating a return to general education in terms of knowledge, with concomitant criticisms of both vocational and socially-oriented education at the secondary level[5]. In other countries, the trend seems to be towards a more social definition of general education which, *inter alia*, opens up the possibility of a greater vocational emphasis. Writers on continuing education emphasize the need to give students the experience of succeeding at school, so that they do not subsequently reject the whole idea of education, and hence the need for a pluralistic conception of human abilities[6]. In principle, an education which is general in all four ways would seem the most desirable, but this is a difficult balance to strike, and it can quickly lead to an overloaded curriculum. In addition, at the upper secondary level, the gravitational pull of higher education means that knowledge-oriented definitions of general education will probably continue to predominate.

THE CONTENT OF VOCATIONAL EDUCATION

Vocational education can be defined as education that is oriented towards employment, or that makes people more employable in one group of occupations than another[7]. Unlike general education it has a single point of reference: work. Mitter[8] has therefore suggested that it can be seen as one of various forms of *special* education that may follow or complement general education.

In principle, since vocational education derives its objectives from the world of work, changes in the world of work will bring about changes in vocational education. In practice, the relationship is not so simple. As Benner has shown, training categories and occupational categories do not necessarily coincide[9]. Lutz[10] has suggested that over the longer term the structure of vocational education and certification may affect employment structures. There is general evidence of considerable elasticity of substitution among educated/trained manpower[11]. Training may be less specific than it appears – especially to educators – when one takes into account the hidden curriculum of norms and expectations. And training courses can and do diverge from work practices, for better or worse. Nevertheless, it is to changes in employment that one must first look if one is to analyse current or likely changes in vocational education[12].

There are four major changes in the nature and structure of employment that seem likely to affect the concept of vocational education/training. The first is the fact that continuous lifetime employment can no longer be expected by all workers. If people cannot get continuous work, where does this leave the concept of vocational education? One response, evident in Germany for example, is to maintain the existing pattern of vocational education/training on the arguments that *(i)* there is reasonable chance that job opportunities will occur as growth resumes, *(ii)* even if the relevant job opportunity does not occur, the person can transfer or redeploy what he or she has learned, and *(iii)* education/training will in any case give the person a sense of identity and a positive self-concept. An alternative response, which has been mooted in educational rather than training circles in the United Kingdom, is that young people should be explicitly prepared for employment *and* unemployment – the latter by incorporating topics such as "life skills" or "coping skills" into the curriculum; or by including information about unemployment benefits and concessions for the unemployed; or by providing more general education, and de-emphasizing the work ethic.

A second major change in employment is that, even if people do become employed, the content of their work is increasingly difficult to predict. In the past, the content of work changed less rapidly, because technological innovation had not become institutionalised, and because economies were less permeable and therefore less volatile. Such arguments, however, need to be treated with some caution. The fact that people change jobs more frequently does not necessarily mean that they change their type of job; it may be simply a change of employer. Secondly, many changes in the type of job are within firms which provide in-house adult retraining to facilitate such changes. Thirdly, as already suggested, initial training is less specific than it appears, anyway.

There is, nevertheless, the problem of "training for uncertainty". Three responses to this are evident in Member countries. The first is to broaden the initial training base: to group occupations in families, or to identify generic skills, so that the content of initial training is much wider than it used to be[13]. After this broad base, training can become progressively differentiated, but it should still be easier for the student to be re-trained or re-oriented if necessary. This "generic" approach has been advocated in a number of countries, including Finland[14], Denmark and the United Kingdom. A possible drawback to this approach is that it may force students who do have a specific occupation in mind to undergo a broad training which may not interest them. Moreover, if the broad-based course is not followed by more specific and continued training, both students and employers may feel that the initial training does not really equip them to do anything properly. Another problem, which has arisen with the German *Berufsgrundbildungsjahr*, is whether it can be counted towards a traditional apprenticeship[15].

A different response to the problem of training for uncertainty is to shift the emphasis from the content to the process of training. The distinction between content and process was

central to much secondary school curriculum reform in recent decades and is associated with theorists such as Bruner[16], who wrote:

> "We teach a subject not to produce little living libraries on that subject, but rather to get the student to think mathematically for himself, to consider matters as an historian does, to take part in the process of knowledge-getting. Knowing is a process, not a product".

If one cited as examples not mathematics and history, but accounting or food processing, the same argument could be, and is, applied to vocational education/training, particularly at the middle and higher levels. Nor is the process emphasis necessarily confined to specific subjects or occupations: some writers have explored the teaching of "general problem-solving", or "learning to learn", or "central strategies"[17]. Such work also relates to research on cognitive styles (i.e. differences in the ways individuals typically perceive phenomena and organise information) that has linked such differences to occupational preferences[18]. A "process" emphasis in training also relates to the issue of transfer of learning, i.e. the ability to use what was learned in one situation in quite another one.

Policy statements in nearly all OECD countries currently speak of the need for a flexible and adaptable workforce, in view of the high rates of economic and social change. Unfortunately, it is not clear how this is to be arrived at. The fact that people already change jobs, and types of jobs, in large numbers suggests that there is a good deal of flexibility anyway. But the research on transfer of learning, whether of skills or concepts, is notoriously difficult and inconclusive. Behavioural psychologists tend to expect little transfer, cognitive psychologists a good deal. There are signs that the whole idea of transfer is being re-conceptualised in the light of the "cognitive revolution" in psychology, in terms of hierarchies of learning strategies. Perhaps a more useful distinction is between those who regard transfer as a function of the situation (degree of dissimilarity in elements and procedures) and those who see it as a function of the person (general intelligence, tolerance of risk, divergent thinking). The latter suggest that flexibility has a good deal to do with attitudes and self-concepts, and can be encouraged, as a general trait, not so much by direct training as by creating a training environment which emphasizes contrast, diversity, openness to risk, and to self-redefinition. In other words, it is the training ethos, rather than methods, that is likely to promote flexibility and adaptability, and the importance of the trainer himself as a model cannot be over-emphasized.

A "process" emphasis in training clearly holds out possibilities, but the problem is that it is difficult to find ways of turning abstract conceptions such as transfer, learning to learn, or general problem-solving, into concrete operations. The approach demands a lot from students and trainers, who may both prefer to work in more concrete and routine ways.

A third approach to the problem of training for uncertainty is essentially organisational, rather than curricular. It involves retaining the existing specific pattern of initial training, but making provision for regular adult updating and retraining. This avoids the curricular problems of either generic or process-oriented initial training, and also the difficulties of predicting training needs more than a few years hence. Adult retraining/updating can thus, in principle, be closely geared to demand. Many countries are beginning to organise existing adult training into a comprehensive strategy[19]. These developments fall beyond the scope of this report, but they have implications for 16-19 provision. Above all, they suggest that, crucial as the 16-19 stage is, it cannot and should not be expected to cater for all vocational needs. They also have implications for the structure of studies, which will be explored in the next section.

Two other trends in the structure and nature of employment that affect training must be mentioned briefly. The first is the need for a better theoretical understanding in certain fields

than was the case in the past. Of course, examples of the opposite trend come quickly to mind: using calculators instead of mental arithmetic, and replacing components instead of repairing them. However, the general trend in many fields is for courses to become more "scientific" – this is true in fields as different as electricity, electronics, accounting and nursing. Some practitioners see this scientific or academic "drift" as a result of too much school/college-based training, and not enough learning on the job. The reasons for it, however, may also have to do with the increasing sophistication of technology and organisation[20].

The other trend that affects training is, in some ways, the opposite: a greater emphasis on human and social factors[20]. The importance of human factors – motivation, communication, job satisfaction, group norms – in production is a basic element in modern management theory, and may be related to the democratization of work structures. Equally, the social effect of technology, its impact on the community and the natural environment, is also a topic which is now included in some training courses at every level, from general vocational preparation to the medical, legal and other professions.

In the near future, the four trends outlined here – youth unemployment, rapid technological and social change, increasing sophistication of some work processes, and greater emphasis on human factors – seem likely to influence the pattern of vocational education and in some respects make the distinction between it and general education less sharp. In the longer term, the role of technical education at the post-compulsory stage could assume more prominence in two ways. Technical education is a form of vocational education in that it prepares students for middle- and higher-level posts in occupations that have some scientific or at least systematic basis. It can also be fairly general in its scope, since such occupations involve not only technology but human organisation, not only theory but application, not only facts but values and choices. Technical education can be seen, therefore, as a potential "bridge" between the general and the vocational. This bridge could take on more numerical importance if a larger proportion of the age group eventually enrolled in technical streams, even to the point where general and vocational streams became the minority ones. However, much depends on the structure of employment opportunities over the next decade or so, and these are by no means clear. A second possibility is that technical education will itself develop a language of generality that will allow it to claim to be the appropriate general education in a technological society. There are signs that such a language is indeed developing around the ubiquitous concepts of information (linguistic, mathematical, computer, graphic), resources (material, human, financial), processes (exchange, interactive, transformational) and systems (natural, technological, economic, social). It is a language that, significantly, appears to cut accross both subject and occupational boundaries.

THE STRUCTURE OF STUDIES

The decision as to what to teach is the most basic that curriculum planners and teachers have to make. We have already explored some of the factors affecting such decisions in both general and vocational education. No course exists in isolation; it is preceded by other courses; and often leads on to others again, or to activities outside education. Moreover, it typically exists alongside other courses, to which it may or may not be related. These vertical and horizontal relationships between courses constitute another aspect of curriculum policy, namely, the structure of studies. This we will now discuss.

There is no agreed definition of what constitutes a "course of study", but generally it can be taken to mean the smallest distinct unit of study that is separately assessed. (The term

"course" here is meant to include non-formal, employment-based teaching and training, as well as institution-based teaching.) The structure of studies, that is, the overall pattern of courses, is determined largely by:

a) The *size* of the units of study: the proportion of the total available study time they occupy;
b) The *length* of the units of study, and in particular whether they are broken down into *stages* or not;
c) *Access* to the units of study, i.e. whether there are prerequisite courses or other conditions for entry;
d) Whether the units of study are *prescribed* or *optional.*

Clearly, these factors can combine in a large number of different ways to produce a wide variety of structures. Here we will consider only those that commonly exist in post-compulsory provision.

One traditional structure is the *specialised unbroken line of study.* Traditional apprenticeships and some academic lines are examples of this. At the end of compulsory schooling, the student commits himself or herself to a particular field or vocation, and continues to study it without interruption until the end is reached, anything from two to six years later. There are usually no intermediate steps or qualifications. The great advantage of the unbroken line of study is that it allows complete and continuing concentration on one thing. Knowledge of the field of study, be it academic or vocational, can accumulate steadily over a period of time, till in the end the student is thoroughly immersed in it. The continuity means that often a whole group of students can stay together throughout the course, and build up a sense of group *camaraderie.* This can help to carry the individual student through troughs of uncertainty or low motivation. And since such lines are typically fairly specialised, the student knows who he is and what he is trying to do.

The problems of unbroken lines of study are the obverse of these advantages: narrowness, absence of choice, and a possible sense of claustrophobia. Such lines make the student's decisions for him, enfolding him in a web of dependence. They allow assumptions about "essential content" and "necessary sequence" to go unchallenged by contact with other fields and atypical students. If the student does not make the right choice at the beginning, he cannot unmake it easily, or leave with an intermediate qualification. He may find that, five years on, the employment market has changed, and he cannot get the job he expected to get.

The unbroken line of study is above all a structural expression of the need for differentiation at the post-compulsory stage; differentiation not only by field, but by level and type of ability. Transfer from short lines to longer lines, or *vice versa,* in the same field of study may be difficult. The unbroken line implies that at this stage of a student's development, specialisation and commitment are the guiding principles.

The broken line of study, or *study-by-stages,* retains the specialised emphasis on a particular field or vocation, but breaks down the sequence of studies into several stages, each of which ends with a recognised (and often worthwhile) qualification. Students can thus stop after, say, one or two years, and content themselves with an intermediate qualification if they do not wish to proceed further or if they want to start again along a different line. This kind of pattern is common in the courses of the City and Guilds of London Institute (CGLI), and the Business and Technical Education Council (BTEC) in the United Kingdom, among many other countries: the German equivalent is *Stufenausbildung.* The arguments against study-by-stages, which tend to be adduced by exponents of the traditional apprenticeship pattern, are that it is more suitable to institution-based than employment-based training; that

it interrupts the continuity of studies and begins to fragment them; and that it reduces students' commitment to any particular line.

Another common pattern in OECD countries is that of *progressive specialisation.* The student begins with a broad core, or platform, of studies, and subsequently focuses more and more on the subjects or vocation he or she chooses. Since the core is broad, it tends to be prescribed; after that, more and more choice is permitted, provided that it shows a "logical" progression. There are several arguments in favour of this structure. "Occupational family" cores tend to be justified in terms of "training for uncertainty"; "pre-vocational" cores in terms of transition from school to work; and "integrated" or "comprehensive" cores in terms of an avoidance of selection and stratification, and a commitment to comprehensive education, as in Sweden. In all cases, however, the structure embodies the belief that students cannot be expected to commit themselves immediately to a specialisation which may have heavy educational and social opportunity costs, and that it is better to scan the field of possibilities, gradually focusing on the option which suits them best. Critics of this structure argue that *(i)* a common core is appropriate at the compulsory, not post-compulsory, stage, by which time such choices should have been made; *(ii)* that common core courses are inevitably broad and superficial; and *(iii)* that the best course for some students is not to eliminate options gradually, but try out a series of specialisations, which one British report called "the one-sidedness of youth".

The arguments for and against such a structure depend heavily on the models of general and vocational education. Despite its logical appeal to many planners, contradictory trends exist for example, in Japan, where there are plans to reduce the core to avoid alienating the less academic students, and in the United States, where there are pressures to increase it so as to ensure a minimum array of competences. Much depends on the scope of the core, and the greatest problems arise in designing cores that attempt to integrate general and vocational elements. A largely academic core, as for example in the International Baccalaureate scheme, or a largely vocational one, as proposed by the Further Education Unit in the United Kingdom, presents fewer, though by no means few, problems. Finally, it is worth noting the distinction between content and structure in this case: terms such as "core curriculum" or "common core" refer to a structural arrangement, not to a body of content, which is referred to by terms such as general education, general vocational education, occupational family, or generic skills.

A fourth major structure of studies that exists in OECD countries is the *modular* one. In this, all courses are standardised in terms of size (percentage of total study time) and length: they thus form modules, or units, or "building-blocks". Each module is separately assessed, typically on completion, rather than later. These are the essential features of a modular structure, but in practice other features are kept to a minimum, and the relationships between modules are as flexible as possible. Each module is expected to be self-contained. Thus, if a student needs to choose 12 modules out of a total array of 50, he or she can, in principle, choose any relevant qualification[21]. In practice, timetabling clashes and distinctions between "levels" of module tend to modify this picture of unfettered choice.

The main argument in favour of modular structures for the 16-19 age group is that they maximise student choice at a stage of life where individual development, economic uncertainty and changes in technology all suggest that decisions are best viewed as provisional[22]. There are, of course, subsidiary arguments: modular structures allow students to interrupt and resume their studies later, as adults; they permit the alternation of study and work; they facilitate geographical mobility through transfer of credit; they expose duplication of content; they force greater clarity about objectives; and lead to a generally more rational system of provision. The criticisms are equally well known. Modularity fragments knowledge,

destroying both sequential and horizontal relationships; it creates ever-changing student groups, which never get time to cohere properly; it makes teacher-student relationships transient; it leads to loss of identity and anonymity among students; it increases the amount of assessment and encourages students to dismiss the content of courses once they have completed them; it makes teaching more bureaucratic and burdened with paperwork; it does not save money because the links still have to be made between modules; and it confronts the teacher with groups who are not only mixed in ability, but also as regards previous knowledge and experience, purpose and direction[23].

Despite these drawbacks, modular structures, and perhaps even more the concept of modularity, have spread well beyond their country of origin, the United States, to influence provision in many countries. In many cases, they have modified existing structures rather than replacing them, and it is perhaps in *restricted modularity*, rather than the completely free-choice "cafeteria" system that the way ahead lies. The arguments for, and the existence of, the other kinds of structure described here – unbroken lines of study, study-by-stages, progressive specialisation through cores and options – suggest that it is not appropriate to maximise student choice at the expense of all other considerations of continuity, progression and coherence. If there is any significant convergence of structures, it is likely to use modularity not to determine curricular relationships, but to express them, rather as money enables us to buy things, but does not determine what we buy. Modularity can be used to standardise the *size* and *length* of units of study, without necessarily determining *access* to them or their *prescribed/optional status*. Even this modifies alternative structures to some extent, but it does allow, within the totality of a modular scheme, local arrangements whereby, for example, some courses are prerequisites to other courses and some courses have to be taken alongside others. The difference between a cafeteria system and restricted modularity is a matter of degree, but a sufficiently large one to justify us in viewing modularity as a curricular currency rather than a curricular structure. The implications of this distinction will be explored presently.

THE PROCESS OF STUDIES

The content of studies always takes some concrete form. It is organised into certain syllabuses, taught by certain teachers, assessed in certain ways, and learned in a certain environment. Since these forms and processes are often extremely repetitive, varying little from day to day and week to week, it is not surprising that they affect the student, even to the point where he remembers them when he has forgotten the content: a common experience of adults looking back on their school days. This paradox can be expressed by saying that process is a kind of content.

It is therefore important to consider how and where 16-19 year-olds study, as well as what they study, since the study process and study environment may affect their self-concept, attitudes and performance in subsequent work and life. We have already suggested that different ways of structuring and articulating content can affect the perception of, and attitude towards, that content. Long, continuous and self-contained lines of study are likely to immerse the student in the sub-culture of the particular subject or field; modular schemes seem to encourage more detachment; and either of these can be seen as valuable or undesirable.

As to the impact of the study environment and the teaching-learning process on the student, it is common, in post-compulsory provision, to contrast school-based and employment-based studies. Each has certain advantages and disadvantages. School-based studies permit focusing and concentrating on the business of study. After all, schools are organised precisely and single-mindedly for this purpose, at least in theory. Everything is thus geared to a single end: the day is organised around study periods, the facilities and resources are at hand, the teachers are usually full-time professionals, as, in a sense, are the students. The boundaries between the school and the outside world are functional boundaries designed to protect the learning environment from intrusions and distractions, and to ensure that the risks inevitably taken in learning are not real risks.

On the other hand, there is no denying that schools are limited, and limiting in certain ways. For one thing, they provide little variation in form and routine, as distinct from content. They are highly regulated, and provide little experience of dealing with the unexpected. Their social structure is essentially a blend of hierarchical and peer-group structures, and thus provides limited experience of the range of social relations that exists in the outside world. In many ways, also, schools inculcate dependence rather than autonomy to the point where the student comes to identify learning exclusively with schooling. The syllabus is presented as given; the teacher is expected to take the initiative; the examination system provides the ultimate control. Most subtly of all, there is the sense that school is in some ways a simulation of life, and that the rewards and penalties are surrogate rewards and penalties, not real ones. However hard teachers try, it is difficult to overcome this sense of artificiality – which can turn into a sense of unreality.

The advantages and disadvantages of employment-based study are equally well known. On the positive side, this kind of training – whether in the form of contracted apprenticeship, or training status in an enterprise, or work experience – gives real experience of work. If mistakes are made, firms can lose money, people be deprived of services, employees injured. Depending on the job, the daily pattern may be more or less routine. The pattern of social relations varies from one workplace to another, with elements of authority, teamwork and individual responsibility. But whatever the organisational structure of the firm, enterprise-based training allows young people to get acquainted with the values and norms prevailing in the workplace and to have closer and more varied links with the adult world; this is also an advantage for their subsequent transition to working life. As against this, the workplace has drawbacks as a learning environment, apart from the risks just mentioned. Training and learning are never the primary purpose of the organisation, and hence may have to take second place. The problems that arise at work may be too complex or too simple, or occur in the wrong sequence, or need too quick a resolution, to facilitate learning. Unless deliberate efforts are made to plan the training experience, it can easily degenerate into menial or repetitive tasks, with little variety and little real monitoring. Trainees and apprentices are usually at the bottom of the hierarchy, and hence are not always encouraged to think for themselves. Depending on the firm or agency, the scope of activity in the workplace may be quite narrow, and the equipment or methods out-of-date. Those responsible for training may or may not be trained for that purpose.

Relative emphasis on school-based or employment-based education/training for 16-19 year-olds varies considerably from one OECD country to another, and seems mainly to reflect historical differences in the way education and training have developed. The strong emphasis on apprenticeship in Germany, Austria and Switzerland, and on work-based training in the United States contrast with largely school-based provision in Sweden, Italy and Japan. In France, both kinds of provision exist side by side. What is interesting here are the attempts in different countries to modify the existing model, so as to minimise the drawbacks.

School-based provision can be modified in several ways. Provision for work experience can be built into the curriculum, as an option or as a requirement. This at least exposes the student to a different environment, even if it is not always easy to integrate the work experience with the school experience. Alternatively, 16-19 provision can be made in colleges rather than schools; colleges which can be oriented specifically to the needs of the age group, with less emphasis on the rituals and constraints of school, and a greater openness to the outside world, in terms of both work and the community. Institutions of this kind already exist in some countries (e.g. Australia, Canada, United Kingdom), and are variously called further education colleges, tertiary colleges, or community colleges. A potential advantage of creating separate institutions for the 16-19 age group is that such colleges can also cater for young adults (from 20 to 25) or even older adults, as indeed do the community colleges in the United States.

Employment-based studies are also being modified in several ways. Apprenticeships and work experience can be based on two or more firms rather than one workplace; such "inter-enterprise" training, which has been experimented with in Germany, helps to broaden the often narrow scope of training in small firms. Mention has already been made of the creation of "polytechnic centres" in East Germany, which provide a bridge between school and local industry; these may be located in, but are kept distinct from, local industries. In many countries, a pattern of alternation between education/training and work is evolving[24]. In the United Kingdom, day release and block release have existed for many decades; and the principle has been reinforced by the requirement of at least 13 weeks' off-the-job training in the Mode A option that can be followed in the Youth Training Scheme. "Co-operative" education, involving alternation, is an important trend in the United States.

Behind all these developments lies the implicit or explicit recognition that the process and environment of study are an important element in curriculum planning for the 16-19 age group. Unfortunately, there have been fewer studies of the "hidden curriculum" in vocational education than in general education so far, and virtually none that compares the implicit messages, models and norms of one with the other[25]. Yet there are frequent references to the "culture of training" and the "culture of education" and the gap between them: a gap that often appears in the mutual incomprehension and distrust of educators and trainers, or more subtly, of general educators, vocational educators and trainers. There is a need for research comparing general and vocational education in terms of the attitudes and norms they inculcate, particularly with regard to authority, working relationships, critical thinking and the attitude towards terms of reference, self-reliance, risk-taking, flexibility and transfer, working to deadlines, and perception of role and self-concept. These aspects of the process of education may be much more difficult to bring to light than the formal content and structure of courses, but equally their effect on the student may be more lasting.

IMPLICATIONS FOR CURRICULUM POLICY

We have now seen the diversity of models, structures and types of provision that exists at the post-compulsory stage in Member countries. These models and structures cannot be dissociated from their national historical and economic contexts, but it may yet be useful to identify some issues and trends that have general relevance for current policy, whether in content, structure of studies or teacher-learning process.

A current policy issue in many countries is the extent to which general and vocational education should be differentiated or integrated at this stage, not simply in terms of

institutions, but of curricula. In one sense, this is a question of timing. In primary or basic education, there is no curricular differentiation between what is general, and what is generally vocational. However, the further one progresses up the educational ladder, the greater become the pressures to differentiate – from higher education with its specialisation, from the labour market with its specific demands, and arguably also from the increasing individual differences in students' motivations and interests. The social, economic and educational arguments for delaying such differentiation as late as possible have been spelled out elsewhere in the report.

Total integration and total differentiation of studies are eschewed in all countries; indeed, a certain convergence is evident, in that some countries with highly differentiated systems have moved to counter the negative effects of these, while the need for greater differentiation (in the form of more options) has been recognised in other countries with relatively integrated provision. However, there remain basic differences in policy. In some countries, differentiation at this stage is seen as both inevitable and desirable, and arguments for curricular integration or "generic" studies are resisted. This approach seems to imply a "stage" theory of the curriculum. Instead of trying to reconcile all curricular aims at every stage of the education system, one identifies a characteristic task and structure for each stage; balance is achieved, not within each stage, but in the totality. In this view, differentiation at the post-compulsory stage is quite acceptable if it follows a thorough general grounding at the compulsory stage and is followed by opportunities for compensatory and continuing education and training for adults. The main problem with this model lies with the latter; provision for adults tends to be less than adequate, and even where it is generous, the take-up shows the characteristic asymmetry of social class.

The alternative policy is to attempt to integrate or at least co-ordinate curriculum provision at the 16-19 stage. It is possible to identify more and less compatible forms of general and vocational education. One suggestion is that it is the pragmatic model of general education, and school-based vocational education, that are likely to be most compatible. This compatibility has been evident in the upper-secondary high school in the United States, and has facilitated the development of the notion of "career education" in that country. The academic model of general education, reinforced by a current emphasis on academic standards in some countries, appears least compatible with vocational education. A "populist" variant of the polytechnic model, a commitment to comprehensive secondary education, and mainly school-based vocational provision make some integration possible in, for example, Sweden and Norway.

More pragmatic modifications of both general and vocational curricula are possible, and quite common. These typically take the form of adding some general studies (e.g. literature, social studies) to vocational lines, and some vocational competences (computing, business studies) to general lines. These "additives" are not always successful, being difficult to integrate with the main body of studies. There are, however, two themes which seem to cut across the general/vocational distinction. Education *about* work, as distinct from education *for* work, can provide a common topic for both groups, and indeed seems a subject which is particularly apposite to this stage of education/training. It can also provide a starting point for career counselling. Examples of such courses exist in several countries, including Germany (*Arbeitslehre*), the Netherlands and the United States.

Another possible common theme, though one that is usually a tangential rather than central concern in existing courses, is what might be called the "developmental tasks" of the 16-19 age group. Developmental psychologists (such as Erikson, Loevinger, Kohlberg and Perry) have written extensively on the particular characteristics of this stage of the lifespan, and such work might help to inform discussion of the personal and social issues which affect

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adolescents and young adults in industrialised societies. Role education is more familiar in adult education (pre-retirement courses, ante-natal courses) than at the post-compulsory stage, but there seems no reason why it should not provide common ground for students in this age group too. Kallen has suggested that self-reliance and resourcefulness are the most precious qualities that education can give people in this age group, especially those who are disadvantaged[26].

There are important developments within, as distinct from between, general and vocational education, and it would be unfortunate if the issue of integration overshadowed these. In particular, the re-thinking of vocational curricula in the light of current employment and technological trends has been radical in some cases, and of a generality not traditionally associated with training; a generality which in some respects challenges the generality of general education. The development of a "meta-language" of technology has already been noted in this connection; but it is also worth recalling the continuing, if limited, influence of German theorists of vocational education such as Kerschensteiner and Spranger, who argue that general education can be achieved *through* vocational education; and that the vocational identity provides a necessary focal point for the young adult, in his or her development towards full maturity. Without such a focus, they argued, there is nothing for general education to relate to.

The analysis of the *structure of studies* showed their diversity at the post-compulsory stage. Each structure has advantages and disadvantages, and determines the course of study in terms of scope, length, access, choice, and so on. The problem is that the needs of students, employers and institutions are extremely diverse, and often conflicting at this stage, and no one structure can satisfy them all. Is it possible, therefore, to have a "neutral" structure, which expresses and facilitates curricular relationships, without determining them?

A purely neutral structure, that is, one that has no effect on the content and process of studies, is impossible. However, it was suggested that a general agreement as to the size, length and level of units of study might provide a curricular "currency" at the 16-19 stage, without predetermining curricular relationships[27]. For example, if a standard unit of 12 weeks' equivalent full-time study were established, all courses (and employment-based training) could be measured in terms of this standard unit (assuming an academic year of 36 weeks, and a working year of 48 weeks). Furthermore, all courses could be rated by levels of difficulty[28]. A system of credits or equivalences would thus exist based on size, and the level of difficulty of the provision.

These figures are given only by way of example; the point is that such a "currency" does *not* specify the relationships between the units. It is quite possible, within such a system, still to prescribe certain sequences, lines or cores of units, which sharply limit student choice, if this is deemed desirable by the provider. Indeed, the balance of prescription and choice can be left to the interaction of supply and demand. If students feel that a tightly prescribed curriculum is worth it, they will accept the constraint. If they do not, the courses will atrophy for lack of demand. The argument in favour of such a "currency" is that it provides more overall flexibility at a stage of education/training where many factors – developmental, educational and economic – conspire to make student choices provisional. It provides different forms of study, and study and work experience, with a common method of "accounting". It also facilitates part-time and discontinuous study.

In sum, a common currency for units of study in post-compulsory education and training allows more choice, flexibility and transfer without going as far as an unrestrained modular "cafeteria" system. (There is, however, some evidence of "creeping modularity", i.e. once such a system is established it tends to become more modular, rather than less; a tendency that needs to be carefully monitored.) A more flexible system, however, presupposes effective and

continuous counselling, which could not usually be based on any one provider, but would have to give a cross-institutional perspective from a neutral base. The new pilot project on educational counselling and credit transfer in the south-west of England will be of interest in this connection[29], but it is safe to say that adequate counselling is a major problem in post-compulsory education in all countries.

As regards the *process* of studies, two general points can be made. First, the variety of content provided for students in upper-secondary schools contrasts strongly with the uniformity of their learning environment. The argument for providing students with out-of-school experience is essentially to do with the process, rather than the content of studies, and it is worth noting that students nowadays have fewer opportunities for casual work experience than they had when unemployment was lower. It thus seems sensible to expose students in this age group to a variety of institutional and environmental experiences, so that they can see that schools are not the only way the world is organised. There are various ways of doing this, such as co-operative education, work experience placements, out-of-school projects, and 16-19 colleges. The need for this kind of environmental variety can be argued in relation to teachers, as well as students.

As regards the *teaching-learning process*, it is useful to distinguish between approaches and methods. Methods are contingent upon objectives and circumstances; an approach connotes a general stance. The methods of educating and training 16-19 year-olds, being contingent upon the who, what and where of studies, cannot be generally prescribed; but the approach should perhaps embody three constant features, regardless of whether general or vocational education is involved:

a) A concern to maximise transfer of learning, so that what is taught is not perceived as being context-bound[30];
b) An emphasis on the internalising, by the student, of the teaching process, e.g. setting goals, structuring information, checking results[31];
c) An awareness of the counselling dimension of teaching, so that the teacher provides the front-line of counselling, backed up by professional counsellors and community resources[32].

Such recommendations are familiar, worthy, and rather vague. They need to be translated into concrete terms, and this can only be done by the detailed analysis of teaching styles during in-service training. But their long-term and cumulative effect may be, to judge from the experience of adult educators and trainers, as important as the reform of content or structures, since together they constitute the capacity for what Tough has called "intentional change"[33].

This report stresses the need for a more comprehensive view and approach to the problems of the 16 to 19 age group. However, it also makes clear that there are different levels and interpretations of the term "comprehensive". In order to synthesise the discussion, even if it entails a simplification, the term comprehensive, when applied to curriculum and organisation of studies can be interpreted in four ways. First, it can mean a comprehensive system of information and counselling for young people, which advises them on the entire range of educational, training and employment opportunities from a "neutral" base. Counselling based on any one provider is unlikely to provide the necessary scope, objectivity or continuity, and where systems are highly differentiated, comprehensive information about them is even more necessary. Secondly, there may exist a comprehensive pedagogical approach, which, irrespective of the subject taught or the methods used, emphasizes certain general aims which are deemed particularly appropriate to this age group, namely transfer of learning, internalisation of the teaching process, awareness of options and consequences.

Thirdly, "comprehensive" may refer to a "common currency" for courses and work experience of all kinds, which would facilitate flexibility, lateral movement and alternation of study and work, while allowing different lines and types of study to retain much of their existing pattern and identity. Fourthly, "comprehensive" could refer to a common core curriculum which integrates different types of studies and, in particular, transcends the distinction between general and vocational education. From the arguments and evidence adduced here, the above list seems to be in order of increasing difficulty.

NOTES AND REFERENCES

1. Modifications in the patterns of English and French academic upper-secondary streams are currently under discussion. The German pattern was narrowed some years ago: see Gellert, C., "The implication of upper secondary school reform in the Federal Republic of Germany", in *European Journal of Education*, Vol. 16(2), 1981, pp. 175-183.
2. See Plunkett, D., "The risk group: education and training policies for disadvantaged young people in Sweden and Denmark", in *Comparative Education*, Vol. 18(1), 1982, pp. 39-46; and F.E. Staff College, *The Netherlands 16-19 Education*, Bristol, 1979.
3. Lawton, D., *Curriculum Studies and Educational Planning*, Hodder and Stoughton, London, 1983.
4. European Community Action Programme; Pilot projects on the transition of young people from education to adult and working life, *Final Programme Report, Synthesis Report*, Brussels, 1983; see also *Les lycées et leurs études au seuil du XXI^e siècle*, ministère de l'Education nationale, Paris, 1983.
5. Boyer, E., *High School*, Harper and Row, New York, 1983.
6. Cross, K.P., *Accent on Learning*, Jossey-Bass, San Francisco, 1976.
7. Evans, R.N., *Foundations of Vocational Education*, Charles E. Merrill, Columbus, 1971.
8. Mitter, W., "Problems of the Interrelationship between General and Vocational Education in Europe", Educacion y Futuro (conference report), Madrid, 1982 (mimeo).
9. Benner, H., *Demarcation of Occupational Groups/Occupational Fields with regard to Vocational Training at Skilled Level in the European Community*, CEDEFOP, Berlin, 1982.
10. Lutz, B., "Education and employment: contrasting evidence from France and the Federal Republic of Germany", in *European Journal of Education*, Vol. 16(1), 1981, pp. 73-86.
11. Psacharopoulos, G., *Earnings and Education in OECD countries*, OECD, Paris, 1975.
12. It is worth noting an increased emphasis on education for self-employment and local economic development, particularly in the United Kingdom and some Mediterranean countries, in recent years.
13. *The Classification of Skilled Workers in the Member States of the European Community*, CEDEFOP, Berlin, 1981.
14. *The Future of Vocational Education and Training*, OECD, Paris, 1983, pp. 24-38.
15. Benner, H., *op. cit.*
16. Bruner, J.S., *Toward a Theory of Instruction*, Norton, New York, 1968, p. 72.
17. See, for example, Baron, J., in Underwood, G., *Strategies of Information Processing*, Academic Press, London, 1978.

18. Witkin, H. *et al., Psychological Differentiation: current status*, RB 77-17, Educational Testing Service, Princeton, 1977.
19. See, for example, Manpower Services Commission, *Towards an Adult Training Strategy*, M.S.C., Sheffield, 1983.
20. Commission of the European Communities, *Technological Change and Social Adjustment* (Commission Communication to the Council), Brussels, 1984.
21. Squires, G., in *Learning Opportunities for Adults, Vol.II: New Structures, Programmes and Methods*, OECD, Paris, 1979, pp. 61-89.
22. European Community Action Programme, *op. cit.*
23. Mansel, T. *et al, The Container Revolution: a study of unit and modular schemes*, The Nuffield Foundation, London, 1976.
24. *Youth Unemployment and Alternance Training in the EEC*, Conference report, CEDEFOP, Berlin, 1981.
25. See, however, Grignon, C., *L'ordre des choses*, Paris, 1971; Gleeson, D. (ed), *Youth Training and the Search for Work*, London; and Nilsson, L., "Vocational education in Swedish secondary schools: trends and reforms", in *European Journal of Education*, Vol. 18 (1), 1983, pp. 31-43.
26. Kallen, D., in Watson, K., *Youth, Education and Employment: International Perspectives*, Croom Helm, London, 1983.
27. See, for example, the concept of *unités capitalisables* in Schwartz, B., *L'insertion professionnelle et sociale des jeunes: Rapport au Premier ministre*, la Documentation française, Paris, 1981.
28. Cf. the recent EEC decision to classify vocational training qualifications in terms of five levels, together with criteria for access to each level.
29. Toyne, P., *Educational Credit Transfer: feasibility study*, Department of Education and Science, London, 1979.
30. Hayes, C. *et al., Training for Skill Ownership: Learning to take it with you*, Institute of Manpower Studies, Brighton, 1983.
31. Kallen, D., *op. cit.*
32. European Community Action Programme, *op. cit.*
33. Tough, A., *Intentional Changes*, Follett, Chicago, 1982.

Chapter V

CHOICE, ALLOCATION AND SCREENING: BEYOND THE CLEARING HOUSE ROLE OF THE POST-COMPULSORY SECTOR

The post-compulsory stage of education differs from the others in that it lacks the relative institutional and curricular homogeneity which allows one to speak, despite all the internal complexities, of a primary, lower-secondary or higher education *sector*. Traditionally this stage was seen merely as the point of articulation between compulsory education on the one hand and the employment market and further or higher education on the other; a kind of clearing house for the output of schools.

In recent years, this stage of education has begun to receive more attention in its own right, with concomitant attempts to identify its essential characteristics and define more autonomous objectives for it. This is due no doubt partly to the specific problem of youth unemployment, but it also derives from the greatly increased number of young people for whom this level represents their terminal education. Some authors have emphasized the developmental nature of late adolescence and early adulthood, and the ideas of transition, experimentation and search for adult identity and roles[1]. Others have stressed the selective, screening and cooling out functions of the education system at this stage[2]. In the first case, the idea of choice is central: in the second, it is the idea of allocation.

If post-compulsory education is viewed primarily in terms of choice and allocation, certain issues become salient. First, there is the question of the *basis for choice*, and how broad that base is[3]. As noted in previous chapters, developments in a number of countries point to a widening of that base either in vocational terms (e.g. basic vocational years, occupational training families) or even in terms which might straddle the general vocational divide – new models of general/technical education, common cores, polyvalent curricula, dual qualifications. These trends towards a broader base tend to be justified both by the advantages of delayed specialisation for the student, and of delayed allocation for the job market. There is increased emphasis on transferability of skills, though it may be asked how f..r this is a matter of putting a label on something that has always existed to a great extent, as studies of the elasticity of manpower substitution would suggest[4].

Secondly, particular significance attaches to *differences in status* among different lines and options. Whether one measures these in terms of length of studies, institutional divisions, access to higher education, or ultimately lifetime rates of return, the existence of hierarchies and pecking orders, both within and across institutions, at this stage cannot be denied. In some countries, attempts to attenuate such hierarchies, and in particular to raise the relative status of vocational lines, are being made often by incorporating them into the main education system; in other countries, vocational lines have a relatively good status anyway, and the view is that they can best protect this by remaining distinct from the school system.

Thirdly, great stress is placed on the *process of choice*. This points obviously to the importance of guidance and counselling at this stage, but also to opportunities for sampling different types of study and forms of work. The high job mobility of school leavers in the years of full employment could in some cases be seen as a developmental search process. These opportunities to sample different kinds of work are now greatly reduced. As regards different lines of study, it is still difficult for many students to reverse initial choices, as they become "locked in" to a particular line or stream. Given the prevailing uncertainty of economic development, it is clear that attention has to be paid to the reversibility of educational and vocational choices at this stage, and to the longer-term possibilities for retraining and recurrent education.

In addition to these considerations, the centrality of allocation and choice at the 16-19 stage underlines the importance of *assessment and certification*. Assessment and certification are not of course separable from institutional and curricular structures and are in part an expression of them. But they are important in that they provide the mechanisms of allocation and choice, they concentrate structures and curricula in *measure*, which is used to sort, screen and select students for further education or employment. It is well known that selection within education is a continuous and cumulative process that must be seen in a wider perspective. Strong variations among countries in the weight assigned to selection at different stages of the education process should also be recognised from the outset.

However, one common feature shared by most Member countries is the *increased responsibility being assigned to the upper-secondary stage in the orientation, allocation and selection of students*. Three major factors have contributed to this "clearing house" role: There are, in the first place, the consequences of the efforts made to decrease and postpone selection in compulsory education. Secondly, there is the fact that access to many higher education institutions is restricted and depends to a large extent on performance during the last years of secondary education. Thirdly, with the extension of schooling, pressures from the labour market have also become particularly strong since the majority of people now leave formal education at this stage and their chances of recruitment largely depend on the level and type of qualifications obtained upon completion of this cycle.

ARTICULATION BETWEEN COMPULSORY AND UPPER-SECONDARY EDUCATION

In the majority of OECD countries the transition from compulsory to upper-secondary education remains a crucial and decisive moment in the life of young people. Paradoxical as it may seem, the expansion of upper-secondary provision has not led to any significant decrease in the competition for entry into this level of education and training. Even countries that have adjusted their intake capacity to 100 per cent of the cohort of compulsory school leavers are faced with quite serious problems of unsatisfied demand. The main concern of young people is no longer that of finding a place at the upper-secondary level but rather *that of entering the institution or programme of their choice*. Problems of matching supply to demand are aggravated by the more frequent fluctuations in demand which are often difficult to foresee: in some countries more young people tend to defer entry or interrupt their studies for a certain period; in other cases students who do not succeed in entering their first choice try again one or a few years later; also more young people aim at obtaining simultaneously or sequentially two qualifications at the upper-secondary level.

The existence of hierarchies among the various options, made particularly evident through student choices, is by no means a new phenomenon. Almost everywhere academic-oriented programmes preparing for, and monopolising access to, universities represented the selective sector and have been at the top of the pecking order. This is still the case in many countries. However, with a larger and more diversified student body and the growing importance assigned to the employment value of programmes – not always correlated with their academic ranking – significant changes in student preferences and in traditional hierarchies have taken place. Rankings of course remain, in some cases they are sharper, but they tend to become more subtle and complex to determine. Moreover, the stronger role of governments in determining the structure of supply, and the greater role of social and economic influences in shaping student choices and strategies, are leading to greater variations among countries and within countries over time in terms of prestige scales and relative attraction of the various programmes.

There is, in certain respects, an inherent conflict in current policies vis-a-vis the articulation between the last years of compulsory schooling and the first phase of upper-secondary education. On the one hand, the aim is to uncouple both levels allowing for a "fresh start", most often in a different institutional setting; on the other, the intention is to smooth out the transition between the two levels. There is also the aim to relieve compulsory schools of their selective role while practically everywhere the type of subjects and marks obtained during the last years of lower secondary education continue to be the main basis on which admission and selection to upper-secondary programmes is determined. *Thus, the tensions involved in the transition to the upper-secondary level are more closely linked to the hierarchies within the system and to admission practices than to the overall capacity of provision.*

The example of Japan is a good illustration of these problems. By now, 94 per cent of compulsory school leavers transfer to the upper-secondary level; but since there are sharp quality differences among schools and there is strong demand for those schools most likely to ensure admission to the top universities, entry at this level is indeed very competitive. Admission into the "best" upper-secondary schools is determined by the combination of the results obtained in the entrance examinations organised by the individual schools and marks received at the lower secondary level. The common pattern is that high- and average-ability students enter general schools (around 70 per cent of the cohort) whereas low-achievers are directed to vocational schools (30 per cent of the cohort). Among the rejected candidates of the more prestigious schools many seek entry into accredited private schools; however, in view of the high tuition fees – particularly in those schools preparing for university entry – this option is open mainly to high-income families. In order to improve their chances of being admitted, boys and girls attend from a very early age a wide range of private, non-accredited schools and private courses (*juku*) aimed specifically at coaching for entrance examinations. A 1977 survey of the Ministry of Education estimated that in 1972 around 37 per cent of children in the last year of basic schooling attended *juku*. Other sources gave a much higher percentage of enrolments in urban areas: by the late 1970s, around 80 per cent of primary school children were attending *juku*. Since competition for entry into the top upper-secondary schools and universities has increased in the course of the last decade, current figures are likely to be even higher.

In the United States, though hierarchies are more diffuse and a smaller proportion of young people is involved in the contest for the selective sector, similar problems arise. Ranking of schools in terms of the proportion of graduates entering the prestigious universities is quite common, in particular among the top institutions; they are quoted in professional journals and by the media, so that well-informed and highly-motivated parents develop strategies at a very

early stage to ensure that their children enrol in the "right" high schools. Since local resources represent a significant proportion of the schools' budget, it is common for middle- and high-income families to move into rich communities likely to guarantee higher quality and greater homogeneity of the student body. Competition for the top-ranking high schools with privileged links to the prestigious universities can be very strong; many of them are private, have high tuition fees and recruit on a national basis. Although test results, school marks and class rankings play an important role in determining admission, elite American high schools usually assign considerable value to the applicants' extra-curricular activities, their personal characteristics and their stated motivations for choosing a particular institution. The importance they attach to having a mix of individual student profiles compatible with the climate and ethos of the institution is evident in the amount of time, resources and personnel which these schools devote to the whole process of admission and selection of candidates.

In European countries, problems related to the transition and allocation of students beyond compulsory schooling and to selection at the upper-secondary level are, of course, related to the particular structure of their education systems. It is difficult to say whether quality differences are less pronounced than in the United States and Japan. They are, in any case, more diffuse and difficult to establish since hierarchies are primarily determined in terms of the specific orientation of programmes, e.g. academic, technical, vocational, with quality variations existing both within and among these broad areas of study. The relative status and attraction of vocational studies vis-a-vis long-cycle academic and technical programmes play a key role in the transition and selection process. In countries where the gap remains very big, entry into vocational education is mainly determined by low achievement in the last years of compulsory schooling and most often is viewed as failure to enter general programmes. This is particularly the case in France, Spain, Italy, Portugal, Belgium. In other countries, primarily in Northern Europe, certain academic lines of study remain at the peak of the hierarchy, while among a growing number of young people there is a clear preference and competition for vocational programmes (see for example figures for Sweden in Table V.1). This pattern tends to become generalised within the OECD area as new groups enter upper-secondary education and immediate employment considerations become a far more important factor in determining student choice.

There are significant differences in selection/admission into academic-type and into vocational-type programmes. In the case of *academic programmes*, the orientation of pupils and their allocation are usually based on performance and on type and number of "noble" subjects taken at the lower-secondary level. Given that activities at the end of compulsory schooling are primarily geared to identifying and selecting academic talents and ability, and

Table V.1. **Increase in admissions and first-choice preferences at secondary school level in Sweden**

Different groups of educational lines in the integrated upper-secondary school	1971		1981	
	First choice	Admissions	First choice	Admissions
Three- to four-year lines corresponding to "gymnasium"	33 000	30 000	43 000	41 000
Four-year lines corresponding to "continuation school"	24 000	21 000	17 000	16 000
Two-year vocational lines	35 000	24 000	66 000	49 000
Total	92 000	75 000	126 000	106 000

Source: L. Nilsson, "Vocational Education in Swedish Secondary Schools: Trends and Reforms", in *European Journal of Education*, Vol. 18, N° 1, 1983.

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that teachers, pupils and their families take account of both the intake capacity of academic-type upper-secondary programmes and the standards they require, a good deal of self-selection and persuasive, quasi-compulsory, orientation occurs before the actual admission process takes place. Thus, the usually high degree of selectivity of this sector is not reflected at the actual point of entry and cannot be meaningfully expressed in terms of the rates of admitted candidates. The fact that very few European countries have entrance examinations to general upper-secondary education and that other aptitudes and characteristics are seldom counted as criteria of access to this level, is further evidence of their strong reliance on the pre-selective role of the last years of compulsory schooling.

The tradition in established *vocational programmes* has been to require completion of compulsory schooling with no particular concerns about rankings and specific indicators of past educational performance. Such practice was partly related to the fact that these programmes recruited primarily young people who one way or another were eliminated or dissuaded by the formal education system to continue further studies. However, it is also true that the vocational sector was traditionally interested in stressing its own distinctive mission and value, and thus did not consider these indicators as highly relevant to their training purposes.

In recent years, the increase in the demand for vocational education has forced many programmes within this sector to introduce additional criteria for selection. In a significant number of cases, the solution adopted has been to rely on the same indicators as traditional upper-secondary schools, thus putting additional pressures on the lower secondary level. Critics of such trends argue, in the first place, that high level of attainment in theoretical subjects is not necessarily an efficient criterion for predicting future performance in these programmes; secondly, that such practice leads to the exclusion of young people with more practical abilities and interests. In addition, close correspondence between level of attainment in the typically selective subjects (mathematics, languages) and social background is viewed as further foreclosing opportunities and choice among the less-privileged groups. The fact that compulsory school leavers have to compete with young people with higher levels of education who seek additional secondary vocational qualifications as a means of improving their chances of employment further aggravates the situation. Several countries, e.g. Finland, Norway, Denmark, have already set quotas on the basis of educational background so as to avoid unfair competition and upgrading of vocational programmes in high demand. In Sweden, the requirement for optional subjects, such as advanced level mathematics and English at compulsory school level for access to "theoretical" lines has recently been abolished because of the social bias it implied.

A main obstacle to reforms in the use of marks during the last years of compulsory schooling for admission and selection into upper-secondary education – particularly where the policy is to uncouple the two levels – is the lack of confidence in, and of agreement on, acceptable alternative solutions. In European countries there are strong misgivings vis-a-vis the use of subjective assessment (interviews, teachers' recommendations) for selection purposes; similarly, there is strong resistance to criteria which are not easy to quantify or not strictly related to educational performance. In this respect, the public in general and parents in particular often tend to be more "conservative" than educators. They seem to accept more readily the exclusion of applicants when rankings are expressed in terms of numbers than on the basis of more global profiles, even when the former most often also imply subjective judgements and when, as is frequently the case, cutting points are established on the basis of a few decimal fractions.

No country has attempted to do away with objective indicators of past performance or school records as a basis for selection into the upper-secondary level, but a few of them,

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particularly the Nordic countries, have tried to reduce their weight by using complementary criteria, such as: aptitude tests or other assessment methods aimed at identifying abilities more closely related to the specific orientation of different types of upper-secondary courses: the award of additional credits for age or work experience in order to facilitate the interruption of studies and subsequent return to formal education for those in need of a break after compulsory schooling; preferential treatment measures aimed at redressing regional and sex disparities in certain courses; drawing lots, mainly used as a last step in determining admission among candidates with very similar qualifications.

Within the vocational sector serious dilemmas are also posed by growing competition for entry into many apprenticeship schemes. Tensions are often stronger than in school-based vocational education, since admission to apprenticeship is in many respects a first and crucial step in the transition to employment and is often viewed by applicants and employers as a commitment to future work within the firm. In large and prestigious enterprises, where competition for entry is very high (e.g. 15 candidates for each place in some of the apprenticeships in the German firm Bayer), admission and selection are rigorously organised in accordance with established recruitment and personnel policies. Many such firms pay great attention to checking the spiral of educational inflation and maintain quotas according to the level of achievement of students in order to keep opportunities open for young people with lower qualifications. The screening process involves tests which measure cognitive development and a variety of aptitudes and skills, a series of interviews with recruitment officers and workers in the firm. Last but not least, the need to abide by personnel policies of individual firms, together with the influence of internal pressures and networks often lead enterprises to adopt subjective criteria – personality tests, general appearance, family connexions of candidates – which in public schools would not be considered acceptable.

CHOICE, ASSESSMENT AND SELECTION IN THE COURSE OF STUDIES

Problems of choice, selection and assessment occur not only at points of articulation in the system but also during the course of study. Four main problem areas at the post-compulsory stage call for special consideration: *(i)* the question of drop-outs and failure; *(ii)* mobility of students between courses and the "cascade" effect; *(iii)* problems in upgrading and blind alleys; and *(iv)* opportunities for re-entry into courses after a break.

The problem of *drop-out* or *wastage* is a complex one, not only to explain, but even to define and to measure. Students who leave a course before gaining the relevant qualification at the end may appear as a gross loss in administrative terms, but not necessarily in educational terms. They may have used the course to sample a particular option; they may have learned something from it; they may even re-enter it at a later date, if that is permitted. However, despite these *caveats*, failure to retain students in the system is usually a cause for concern, first because of the well known social and psychological consequences for many students who interrupt their studies without formal recognition of their achievements; also because of the opportunity costs for other potential students and the waste of teaching resources. Detailed and reliable figures on drop-outs are difficult to obtain and the scattered information provided here can only serve for illustrative purposes. It should be further noted that the examples given below do not take account of the drop-outs occurring before entry into upper-secondary education which obviously affects the interpretation of the data.

In Finland around 20 per cent of those entering general upper-secondary schools – recruiting 48.5 of the 16 year-olds in 1979 – did not pass the final matriculation examination[5]. In Australia[6] in 1982, 54.2 per cent of boys and 60.8 per cent of girls transferred from the first (year 11) to the second and final year (year 12) of general upper-secondary schools. These relatively low retention rates must also be seen in relation to comparable figures a decade earlier: in 1971 these were 49.1 per cent for boys and 42.7 per cent for girls, thus showing a significant improvement, particularly in the case of female retention rates. Strong variations exist among schools; in 1982 retention rates between year 11 and year 12 were 51.6 per cent in government schools, 65.7 per cent in Catholic schools and 108.5 in other non-governmental schools. The latter figures suggest that a certain percentage of young people do not drop out but change schools. Overall figures on the proportion of a cohort leaving before and in the course of upper-secondary education and training in France, Germany, Italy and Sweden are shown in Chapter II.

The OECD study on student flows[7] further points at variations in the proportion of drop-outs according to major types of study: whereas in Denmark, France and Italy general lines of study have higher retention rates than vocational lines, including apprenticeship, the opposite situation is found in Sweden where the vocational sector has the lowest drop-out rates. There may be several reasons for these different patterns. In the first place, they may reflect the "efficiency" or otherwise of earlier selection, before or at entry to post-compulsory education. In the first three countries, the less motivated or less academically gifted may have been "selected out" into vocational training. It can also reflect attempts within vocational education to maintain its standards and norms despite a broadened intake. In some countries where a traineeship or apprenticeship place has to be obtained after the first (school-based) year, a shortage of such places, often for purely economic reasons, may also explain higher drop-out rates. By contrast, in Sweden, where entry to many vocational education programmes is highly competitive, growing numbers are being selected out into certain general education streams. Of course, these figures provide only a simplified picture of the drop-out phenomenon, a number of lines of study having been grouped together under each heading. Drop-out rates may vary widely from one line to another (the natural science line in Sweden, for example, has the highest drop-out rate). Within each group, complex selection mechanisms are at work and the most demanding curricula are not necessarily those with the highest drop-out rates.

The OECD survey also shows variations in terms of the stage at which most departures take place. Whereas in Italy, for example, drop-outs tend to concentrate in the first year of upper-secondary studies, in France the heavier losses occur at the end of the courses. In France it is estimated that around 20 per cent of students enrolled in the last year of general lines of study do not obtain the final qualification. This proportion increases to 25 per cent in the technical/vocational sector and to 50 per cent in the case of apprenticeship. It is difficult to know how far substantial drop-out rates are treated as "normal" and "to be expected" at the post-compulsory stage. In the United Kingdom, drop-out rates in vocational courses were for decades relatively high, and indeed were one of the stimuli for the reforms of business and technical education carried out by the Business and Technician Education Council. It is often argued in Italy that early dropping out is part of the social cost of open access policies. More generally, the expansion of non-compulsory provision to cover most of the age group would be expected to inflate drop-out rates since it may reflect to a large extent a postponement of the selection process which in less developed systems occurs before this stage is reached.

Various measures are being taken to counter the problem. Some of these relate primarily to the content and methods of courses, and stress, for example, greater vocational or personal relevance, the development of new interests such as computing, less formal and school-like

learning environments, group activities, project work, and indeed anything that seems likely to recognise the greater diversity of talents and abilities and to overcome the failure-rejection syndrome of the schools which typifies many young people in the "risk groups"[8].

As regards *assessment*, several trends are worth noting. One is the increased reliance on continuous course-work assessment, at the expense of terminal examinations, in the form of phase tests, assessed projects, essays and practical work. One problem with this is the difficulty of ensuring uniform national standards, since external moderators can usually sample only part of the course work. Another development is the use of profiles to give a fuller picture of a person's achievements, and in particular to give weight to non-academic competences. For the moment, profiling seems to be associated more with non-formal education, and this may in the long run affect its status and acceptability. Finally, there are trends in some countries (e.g. the United Kingdom) towards more use of criterion-referenced tests in the hope that these may avoid the fixed percentages of failure that tend to come with norm-referencing, and in general serve to raise both aspirations and levels of achievement. Such a trend has also existed in the United States for some years, linked with more detailed specifications of job competences and the concept of "mastery learning" with its emphasis on cumulative motivation. However, the selective function of much assessment, together with the inherent difficulty of specifying criteria in some fields and at some levels, suggest that it is no panacea in itself for high failure rates.

Drop-outs from one sector or line of study can result in "drop-ins" in other courses or, when no other alternatives are looked for or found, in net losses for the system as a whole. Key questions in this context are the number and type of transfer opportunities provided, the extent to which students actually make use of them and, also, the effects of these transfers on other groups, i.e. displacement, narrowing of choices. Many countries have developed various kinds of bridges or *passerelles* enabling young people to change programmes in the course of their studies without having to go back to square one. But generally it is recognised that strong rigidities persist and that this is an area where urgent reforms are needed. Almost everywhere student mobility among courses is relatively infrequent and with the development of a greater variety of programmes and options, problems of irreversible choices become more acute. Indeed, policies aimed at deferring choice by providing a common or core curriculum in the first years of upper-secondary education appear to be now more controversial than some years ago. On the one hand, there seem to be now stronger claims in favour of earlier choice if not specialisation; on the other, this strategy is more difficult to pursue when options must be offered to a growing clientele with a wider range of interests and abilities.

Evidence from the four countries covered by the OECD survey confirms that the number of students changing programmes in the course of upper-secondary studies remains very limited (in Sweden it seems to be higher than in Germany, France and Italy). The transfers that do take place are mostly from general/technical lines towards vocational training or apprenticeship. In general those who drop out from vocational training and apprenticeship are net losses. In France and Sweden, of those who drop out from the longer general and technical lines, about one half transfer to vocational training, and the other half leave the system completely. In Italy the proportion of transfers is much lower than the net losses. By contrast, in Germany there seem to be practically no net losses from the "top" lines of the system, so that the losses are essentially those in apprenticeship as well as in pre-vocational schemes.

It is of course difficult to generalise from these limited figures, but they do suggest a cascade or "dropping-down" phenomenon. In general, such a cascade seems more desirable than complete drop-out from the system, but it does mean that students at lower levels are competing with, and may be displaced by, students dropping down from higher ones. Better guidance and selection at the outset of courses could probably reduce the number of such

transfers, but not eliminate them, since both performance and the changes in the employment situation which influence student choices are hard to predict. It seems, therefore, that a permanent flexibility in the system is necessary, and this has implications for the admissions requirements as well as for overall assessment procedures. Measures which could be taken on a broader scale are: the transfer of credit from one course to another; the development of flexible norms of equivalence among programmes without this leading to excessive uniformity; the establishment, in highly competitive upper-secondary technical and vocational programmes, of access methods and criteria which prevent the displacement of young people coming directly from compulsory schooling.

Gross retention figures may also conceal the opposite phenomenon: students who, having chosen a lower-level course, want to upgrade themselves either during or at the end of it. In fact, this issue seems to have attracted more political interest than the drop-out problem in many countries because it is felt that new groups coming mostly from lower social categories should not be trapped in blind alleys. Some countries have, therefore, established mechanisms for upgrading, such as bridging classes, *passerelles*, or second routes. In practice, however, vocational students have limited opportunities for upgrading and, where they exist, the proportions involved are small and apply mainly to those who have completed a course or obtained a qualification. The issue is whether the emphasis should be on building "bridges" and "ladders" within the mainstream education sector, or on developing a parallel structure, as in Germany or Switzerland.

The final problem relates to the opportunities provided for re-entry into formal education after interruption of studies. One set of problems arises in relation to students who, having started their upper-secondary education, want to have a break for a semester or a year either to work or to undertake other activities. This has been a more frequent pattern in the United States, made possible by the development of course credits and the greater freedom allowed to students in organising their own programme of studies; by now it is also quite common in Swedish upper-secondary schools. Here a main question is that of deciding on the optimum trade-off between policies which promote an individual or student-centred approach, also likely to make drop-outs less irreversible, and policies aimed at safeguarding the coherence and integrity of studies. Different, and perhaps more serious problems from a social point of view, are posed in relation to young adults who leave after compulsory schooling – usually under difficult circumstances – who would greatly benefit from higher qualifications. In the majority of countries these groups have been seriously neglected and it could be reasonably argued that, with shrinking cohorts in the coming years, there will be greater opportunities for introducing special measures to encourage their participation, not only in education but also in the world of work.

TRANSFER FROM SECONDARY TO HIGHER EDUCATION

There has always been a special relationship between the traditional upper-secondary schools and higher education institutions, mainly universities. This relationship has four aspects. First, it is typically *consecutive*. Table V.2 shows that in many countries the majority of students go from upper-secondary to higher education without a break. A notable exception is Sweden where only 17.2 per cent of new entrants to higher education completed their secondary studies in the course of the two preceding semesters. In Australia, Germany and,

among women, in New Zealand and the United States, the proportion of those entering after a break of one year or more has increased over the decade; counter trends seem to be less common (e.g. *Instituts universitaires de technologie* in France). Gender differences are significant in some countries but these do not follow a common pattern: in Germany young men defer entry into higher education more frequently than young women, whereas in the Netherlands and New Zealand (full-time students) a larger proportion of women take a break between secondary and higher education. It was frequently argued in the 1970s that "a year or more between" would benefit some students in terms of greater maturity and sense of perspective, but the worsened employment situation has made it more difficult for young people to find alternatives to studies.

Secondly, academic upper-secondary education has always been the *main supplier* of students to higher education. This situation has been modified by the increased intake (e.g. in Austria, Spain, Germany and France) of second-route students from technical streams, and second-chance students, that is, qualified or unqualified adults. But with the exception of Sweden, where no fewer than 50 per cent of new entrants are now over 25, and among part-time students in a number of countries (in Australia over 65 per cent), the main route to higher education, and in particular to universities, remains the one from general upper-secondary streams.

Thirdly, the special relationship has been a matter of *standards*. Higher education has typically looked to upper-secondary education to supply it with students who are capable of taking on advanced studies, and to filter out those who are not capable or not ready. The problem of entry standards in higher education is currently a major issue in the United States, and to a lesser extent in Sweden, although, as Trow[9] points out, United States higher education has a long tradition of providing remedial teaching to bring new entrants up to the appropriate level.

Fourthly, upper-secondary education has typically been expected to provide higher education with students not only of an adequate general standard, but with an adequate *grounding* or *foundation* for the particular field of study they wish to specialise in. In some countries and cases this has meant the *same* field: typically United Kingdom universities will require "A" levels in the specific discipline(s) the student is going to study for a degree, although it is not unknown for lecturers to prefer a clean slate. In other countries, the relationship has been less direct. In France, the Mathematics- and Physics-*Baccalauréat* provides a "royal road" to almost any specialisation in higher education. In Germany the shift from an "encyclopaedic" general education to specialisation in four subjects for the *Abitur* has meant that some students have an insufficient grounding or foundation if they choose a specialisation outside their *Abitur* range[10]. Clearly, the continuity or discontinuity of fields of study in upper-secondary and higher education is affected by cultural assumptions about the screening value and transfer potential of various subjects. There is the added problem that, in some countries at least (e.g. the United Kingdom and the Netherlands), the predictive value of upper-secondary qualifications for academic performance has shown to be rather low[11].

However, as shown in Table V.3 (the proportion of the age group in selected countries who qualify for entry to higher education) and in Table V.4 (actual transfer rates from secondary to higher education) the special relationship is not exclusive. In the latter case, one can see that, to a varying extent, general secondary qualifications serve both as a means of transfer to higher education *and* for other purposes, i.e. entry to vocational or professional training, or direct entry to the job market.

Such qualifications are clearly *used* in a multi-purpose way, but have typically been *designed* for a single purpose, that is, transition to higher education. Even where the universities do not have a direct hand in the planning of syllabuses and specification of criteria,

Table V.2 **Time lag between obtaining 2nd cycle secondary diploma and entering higher education**

Percentages

	1965		1970		1975		1976		1977		1978		1979		1980		1981	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Australia – University FT																		
Following calendar year					92.2	92.6	85.9	85.5	83.6	82.8	82.2	81.0	81.5	79.8	80.4	77.4		
1 year after							7.4	7.2	8.1	8.0	8.1	7.7	7.9	9.4	8.4	9.9		
More than 1 year after					4.5	4.4	3.8	3.7	4.8	4.7	4.3	3.9	5.0	4.2	5.1	4.2		
Other[1]					3.3	3.0	2.9	3.6	3.5	4.5	5.3	7.3	5.3	6.2	5.9	8.2		
– CAE FT																		
Following calendar year					82.7				79.4	86.2	78.8	85.4	78.8	85.8	77.3	83.8	79.4	83.7
1 year after					7.8				10.8	7.1	10.0	7.0	9.3	6.7	10.1	7.5	9.5	7.9
More than 1 year after					9.5				9.8	6.7	11.2	7.6	11.9	7.5	12.5	8.7	11.1	8.4
Other																		
– Universities PT																		
Following calendar year					46.3	33.0	31.7	27.1	33.8	27.0	30.7	17.2	30.1	18.4	26.8	14.2		
1 year after							8.4	7.3	7.2	7.8	7.6	8.3	7.0	8.1	7.3	7.0		
More than 1 year after					28.5	37.6	29.6	33.8	30.7	30.8	20.4	22.2	16.6	18.1	19.8	20.6		
Other[1]					25.3	29.4	30.3	31.8	28.3	34.4	41.3	52.3	45.5	54.9	45.1	57.9		
– CAE PT																		
Following calendar year					48.0				45.3	45.5	40.4	38.3	41.1	42.4	39.8	41.2	40.6	35.5
1 year after					13.0				14.3	11.0	13.0	14.6	14.5	11.9	14.5	12.3	13.1	13.3
More than a 1 year after					39.0				40.4	43.5	46.6	47.1	44.3	45.7	45.7	46.5	46.3	51.2
France																		
– Total University + IUT																		
Same year					74.3						79.0				72.9			
1 year after					11.8						5.8				5.2			
2 years or more					12.7						12.3				11.7			
Indeterminate					1.2						2.9				10.2			
– IUT																		
Same year					86.6						92.3				91.1			
1 year after					10.3						4.9				5.8			
2 years or more					3.0						2.2				2.4			
Indeterminate					0.1						0.6				0.7			
Germany																		
Same year									46.4	81.0	46.1	78.1	40.0	71.5				
1 year after									34.9	11.0	34.1	12.0	34.7	15.3				
2 years or more									18.7	8.0	19.8	9.9	25.3	13.2				
Ireland																		
Non-university																		
Same year													88.9					
Not the same year													9.9					
From abroad													1.2					

Table V.2. *(cont'd)*

	1965		1970		1975		1976		1977		1978		1979		1980		1981	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Netherlands																		
– University – Transfer rate and lag by secondary diploma																		
Gymnasium			(1971)		(1974)													
Same year	75.5	63.4	85.8	68.3	79.6	56.9												
1 to 3 years after	13.9	12.7																
4 years or more	2.4	2.0																
Other	91.8	78.1																
– HBS (Atheneum in 1974)																		
Same year	44.2	21.1	53.4	29.3			69.4	39.3										
1 to 3 years after	11.7	6.2																
4 years or more	4.0	3.6																
Other	59.9	30.9																
New Zealand																		
– Full-time students																		
Same year			71.0	81.2	68.2	74.6	69.4	73.3	69.1	72.3	71.1	72.6						
1 year after			7.2	7.9	11.1	10.3	12.0	12.4	12.0	13.1	10.5	11.6						
2 years after			3.1	1.0	2.7	2.5	6.2	4.6	6.6	4.9	5.8	4.1						
More than 2 years after			2.3	1.4	3.1	2.2	6.5	4.3	6.5	5.1	6.2	5.0						
Special or provisional degree			2.1	1.4	2.0	2.2	1.7	2.4	2.8	2.7	2.2	2.2						
Other[1]			14.3	7.2	12.9	8.2	4.2	3.0	3.0	1.8	4.1	4.4						
– Part-time students same year			43.2	58.3	30.0	45.3	32.2	36.9	26.7	35.0	22.3	25.2						
1 year after			10.3	12.7	12.0	11.7	11.5	11.4	11.9	10.8	11.1	12.2						
2 years after			4.0	3.6	6.2	4.4	5.4	3.6	3.8	3.9	5.5	5.4						
More than 2 years after			11.8	8.5	14.7	10.9	20.7	14.6	23.6	17.2	25.7	20.0						
Special or provisional degree			22.9	11.8	27.0	20.5	27.2	32.3	30.2	31.1	30.4	34.2						
Other[2]			7.7	5.0	10.2	7.2	2.9	1.2	3.9	2.0	5.0	3.0						
Sweden																		
No more than 1 semester after									16.3		17.0		16.6		17.2			
No more than 7 semesters after									49.3		47.8		47.3		51.6			
United States																		
Same year					54.5	56.9	53.1	56.4	55.4	52.9	56.9	57.1	55.4	52.9				
1 to 3 years after					21.2	23.2	22.8	21.3	20.7	21.1	23.8	19.5	25.1	20.1				
4 years or more					24.3	19.9	24.1	22.4	24.0	25.9	19.3	23.4	19.5	27.1				

FT = Full-time, PT = Part-time

1. Including qualifications obtained through adult education or "concessional" which are classified in the "other" category by all university only for 1978.
2. In 1970 and 1975 some of the qualifications giving access to university were not distributed according to the year they were obtained. They represented in 1970 4.9 per cent for men and 1.7 per cent for women and in 1975 5.1 per cent for men and 1.9 per cent for women.

Table V.3. **Proportion of the age group with secondary school credentials qualifying for entry into higher education**

University and non-university

	1970	Last year available	
Austria	15.3	(1978)	12.8
Canada	55.7	(1980)	62.4
Denmark	18.0	(1980)	25.4
Finland	20.6	(1980)	37.8
France	19.5[1]	(1983)	28.0[2]
Germany	11.3[3]	(1982)	26.3[4]
Italy	33.5	(1981)	38.8
Japan	74.2	(1981)	87.0
Netherlands	35.4[5]	(1981)	43.5[6]
Norway			
Arts Degree	23.1		
Diploma 11th and 12th year		(1980)	87.5
Portugal	16.3	(1979)	19.3
Spain	6.2	(1981)	24.1
Sweden	52.3[7]	(1982)	81.7[8]
Turkey	5.6	(1981)	10.5
England and Wales	21.4[9]	(1981)	25.8[10]
United States	75.7	(1980)	71.7
Yugoslavia	21.6	(1977)	32.8

1. Of which 16.2 per cent come from the Baccalauréat général and 3.3 per cent from Baccalauréat de Technicien.
2. Of which 19.7 per cent come from the Baccalauréat général and 8.3 per cent from Baccalauréat de Technicien.
3. Of which 10.8 per cent qualified for education at university level and 0.5 per cent for non-university level.
4. Of which 19.7 per cent qualified for education at university level and 6.6 per cent for non-university level.
5. Of which 10.0 per cent qualified for university education and 25.4 per cent for non-university education.
6. Of which 11.6 per cent qualified for university entry and 31.9 per cent for entry into non-university institutions.
7. Of which 23.6 per cent came from 3/4-year lines of study and 28.7 per cent from 2-year lines of study.
8. Of which 31.6 per cent came from 3/4-year lines of study and 50.1 per cent from 2-year lines of study.
9. Of which 11.4 per cent qualified for university level studies and 10.0 per cent qualified for non-university level higher education.
10. Of which 13.1 per cent qualified for university level studies and 12.7 per cent qualified for non-university level higher education.

Source: Educational Trends in the 1970s, op. cit., Completed with information provided by national authorities.

it can be argued that they exert a considerable influence on teachers', parents' and students' choices and strategies, which constitutes a kind of hegemony in the process of assessment and certification.

The tension between design and use would be lessened if nearly all those who obtained the upper-secondary general qualification did in fact transfer to higher education, as is the case in France, the Netherlands and the United Kingdom. Trends in transfer rates to higher education in the future will significantly depend on whether the higher education sector is itself expanding or contracting, and on whether it is becoming more or less homogeneous.

The development of various types of higher education institutions outside the traditional universities in the 1970s (IUTs, Polytechnics, Regional Colleges, etc.) and the bifurcation into closed and open sectors in some countries means that the main reference point of upper-secondary examinations is no longer as clear as it used to be. Moreover, if, as reported in some countries, a growing number of qualified secondary school leavers pursues further professional training outside mainstream higher education, this could lead to even more diffused links between the two levels.

The tension between the design and use of upper-secondary qualification also involves complex questions about the subjects and examinations themselves. Here, there are two

schools of thought. The first argues that academically-oriented examinations are inherently general, because the cognitive skills they develop or detect are generic, and can be deployed in a wide range of situations and occupations. Thus, banks in the United Kingdom often prefer students with A levels to those who have the equivalent business qualification, which would appear to be more relevant. There may be an element of social status in this, but it is also argued that A levels guarantee a high level of general ability and hence trainability. This kind of argument is also reinforced by the considerable historical weight given to notions of general culture (*allgemeine Bildung, culture générale*, etc.) in certain countries. In this view, there is no contradiction in using "academic" examinations for general purposes; indeed the very distinction would be questioned.

Table V.4. **Transfer rates from secondary to higher education**

	1970		1980	
Australia	(1975)			
To higher education	53.9		42.5	
To universities	28.4		22.0	
To CAE	25.5		20.4	
Canada				
To higher education	51.7		51.5	
To universities	25.0		23.4	
To non-university institutions	26.7		28.1	
France			(1978)	
From *Bac général* to higher education	78.2		84.6	
From *Bac technicien* to higher education	45.9		51.0	
From *Bac général* to universities	53.3		55.5	
From *Bac technicien* to universities	13.5		16.5	
From *Bac général* to classes préparatoires	12.1		12.9	
From *Bac technicien* to classes préparatoires	0.3		0.8	
From *Bac général* to non-university institutions	12.8		16.2	
From *Bac technicien* to non-university institutions	32.1		33.7	
	Male	Female	Male	Female
Japan			(1981)	
To universities	27.3	6.5	38.6	12.2
To junior colleges	2.0	11.2	1.9	20.8
To technical colleges	0.8	0.0	1.1	0.0
Netherlands				
Diplomas from academic streams to universities	94.6	69.7	91.9	66.4
United Kingdom			(1977)	
3 A levels or more	83.6	85.7	81.4	77.6
2 A levels	62.3	72.6	59.1	58.1
1 A level	42.8	61.7	38.2	43.5
United States	(1972)			
4-year systems	30.1	27.8	32.1	34.1
2-year systems	15.1	13.7	21.0	23.6
Vocational schools	9.1	11.8	5.8	8.6

Source: Educational Trends in the 1970s, op. cit.

The opposite view is that academic education is not the same as general education, and indeed is a special form of vocational education, characterised above all by its comparatively long duration[12]. It is true that much higher education is directly vocational (the term professional is usually preferred) and even that which is not overtly so, nevertheless can be linked historically to the growth of certain occupational categories – public service and teaching and, not least, the academic profession itself. The implications of this view are that a distinction needs to be made between examinations which certify the successful completion of a general level of educational attainment and those which control entry to subsequent specialised, vocational categories, of which higher education is one, albeit a rather unusual and dominant one. However, this would imply, in the case of higher education, two sets of examinations or stages of selection – at the end of secondary education and at entry into higher education – with varying degrees of formality. This is an established practice in most of the non-European Member countries but also in the United Kingdom, Ireland, Greece, Spain. It is far more difficult to envisage in other countries of continental Europe (Belgium, France, Germany, the Netherlands, Switzerland) where the notion of right or entitlement of academic secondary school certificates to university entry is very deeply entrenched and powerfully defended.

In between these two views, there exists what might be called a "reformist" position which aims to resolve the tension between the design and use of upper-secondary examinations by altering the examinations themselves. Such reforms, actual or projected, may affect the number, weighting and content of subjects, the methods of assessment (examinations, course work, projects, aptitude tests) or the basis of assessment (norm-referenced, criterion-referenced). The problem with such reforms is that it is difficult to reconcile conflicting demands. Criterion-referenced testing on minimum competences might suit many employers, but not perhaps higher education institutions. The "new maths" may suit the academically inclined, but leaves others bereft of operational competences needed in vocational education and employment. A wider spread of subjects, desirable on general grounds, might entail too steep a gradient of specialisation for those going on to higher education.

An alternative strategy that is developing in several countries is to begin to differentiate more sharply within general streams, so that some of them maintain a virtually exclusive relationship with long-cycle higher education, while others become identified more with short-cycle higher education, and others again fulfill a pre-vocational function[13]. It seems that with the increase in the proportion of the age group enrolled at this level the pressures towards greater differentiation are very strong, and whether this takes the form of differentiation by stages (i.e. more hurdles to cross), differentiation of certificates (i.e. different qualifications), or differentiation within certificates (i.e. different streams), is largely a reflection of national frameworks and traditions.

CREDENTIALS AND THE TRANSITION TO EMPLOYMENT

The role of credentials in giving access to employment is much more complex than their role in giving access to higher education. The range of credentials qualifying for employment extends well beyond those that allow access to higher education. There are many different ways in which the process of certification is organised and controlled and wide variations in the use of such credentials for recruitment or promotion purposes[14].

Whereas credentials giving access to higher education are controlled entirely by the education system itself, employment-related credentials may be controlled by the education/training system, by occupational groups, or by a combination of the two. Occupational groups – professions, chambers of commerce, craft guilds – often wish to maintain at least some control over entry to the group; and this can lead in some instances to a system of dual qualifications, or partial qualification followed by a probationary period: the Italian *riconoscenza della professionalità* is a case in point.

The use made by employers of credentials is also complex. In some situations they do not use them at all. A recent study of 1000 jobs for school-leavers in London showed that in 80 per cent of the cases, employers did not specify educational qualifications when placing their advertisements[15]. Admittedly, sixteen year-old school-leavers in the United Kingdom would not necessarily be expected to have many or any qualifications, but the finding implies that one cannot automatically assume that credentials are important in all cases. Where an employer is faced with a large number of applicants, he may use credentials as a first line of selection to screen out the majority. In other cases, employers use credentials as an indirect or surrogate measure of characteristics they are interested in – perseverance, general intelligence, reliability or initiative. Finally, credentials may be used directly, as a measure of knowledge, attitudes and skills necessary for the performance of the job.

A further aspect of the use of credentials by employers is their recognition, in particular in the case of new qualifications. In some cases, this is a question of time: employers, and particularly small firms, may not know much about new credentials, because they are not well informed about developments in education. But there are more subtle reasons: employers may suspect that the new credentials are not as valuable, relevant or trustworthy as the ones they know, have lived with for years, and probably possess themselves. This suggests that educators and trainers need to make a deliberate effort to "market" new qualifications, and explain to their clients (in this instance, employers) the rationale for change. People in the education system are apt to forget how complex it can appear to outsiders, and it is interesting in this connection that the idea of "educational brokerage" has gained ground in the United States.

As regards post-compulsory education, it is useful to distinguish broadly between general credentials, which tend, or attempt, to be multi-purpose in employment terms, and technical/vocational credentials which are, to a greater or lesser degree, more specific.

Historically, general education credentials have been widely used for entry to employment at various levels, and this use continues. For example, many jobs in the United Kingdom specify a 2 "O" level or 5 "O" level entry, as a kind of general educational platform on which further (in-house) training can be built. However, the value of general credentials seems to be declining in at least two respects. First, their *positional value* declines as a function of the proportion of people in the age group, or competing group, who have them. This is a well-known phenomenon, seemingly irreversible, and it is only necessary to point out that while the credentials may inflate, the category of people being employed, in terms of their relative position in the hierarchy of educational attainment, may remain the same. Thus, at different historical points, different levels of credential may point to the same decile in terms of relative educational attainment, and, if one sees education as a surrogate measure, to other qualities as well.

The *relevance value* of general credentials is also changing. Many jobs now require some technical competences, for example in mathematics, computing, and general familiarity with new technology; and if general education does not include this, it may no longer be assigned the same value, even for screening purposes. There are signs that education systems in many countries are moving to incorporate such knowledge and skills into the general curriculum,

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and international studies of the problem are under way[16]. Progress in the United Kingdom in this field has been particularly rapid. However, the problem is one not only of the content, but also of the length of general upper-secondary streams; this has led to suggestions for "short-cycle" general streams which would allow earlier and better-prepared entry into the job market than the existing, longer ones which are mainly oriented towards higher education[17].

The problem with technical qualifications is rather different. To begin with, in most countries where they are awarded by upper-secondary schools, students with technical diplomas and certificates have been granted access to some, if not all, forms of higher education: the so-called "second route". This has had two consequences. First, this change has generally been accompanied by curricular reforms that have increased the general education component in such courses, thus reducing their specificity. Secondly, these streams have expanded above all in training for the service sector (e.g. commerce) which tends to be less technical than training for other sectors. Thus, this stronger "academic" or "transfer" orientation of technical streams plus the more general process of educational inflation has in many cases lowered the employment value of technical certificates. Also, with growing numbers of qualified school leavers pursuing post-secondary studies in order to increase their chances of entering middle-level jobs, the process of inflation/devaluation is reinforced. Trends have doubtless lowered the value of technical certificates, and some students have thus enrolled also in additional short post-secondary courses, which give them better access to middle-level jobs. In fact, one can argue that in many cases training for many such jobs has become post-secondary rather than upper-secondary: for example, in Germany, the Netherlands and Sweden, some technical lines are longer than the general education ones.

As regards vocational qualifications, there are two main considerations. The technical and general content of many such courses has been enlarged, with the aim of making students more adaptable, and allowing them to progress to higher levels of study. However, some young people may react against a continued or increased theoretical emphasis, preferring something more concrete and job-specific. In Chapter II it was noted that in many countries there existed at least two levels of vocational education, even if the distinction was not always formally made. These two categories have in fact different functions: the lower-level one is practical, specific and may be immediately marketable; the higher-level one is typically broader and more theoretical. It is worth noting that in France many candidates for the higher-level BEP *(Brevet d'enseignement professionnel)* also deliberately take the lower-level CAP *(Certificat d'aptitude professionnelle)* at the same time, presumably to improve their chances of getting a job. It would seem desirable therefore to distinguish, in policy and institutional terms, between the two levels, because they seem to meet different needs.

It is also important that students – young or adult – should be able to obtain vocational qualifications without necessarily attending the formal course that leads to them. With the growth of formal education provision, the opportunities to take trade tests or examinations without following a prescribed course tend to have declined (though they are still widespread in developing countries). The advent of new educational technology means that students should have many modes of study open to them – full-time, part-time, on-the-job, at a distance – and it would be unduly restrictive to limit access to qualifications to those coming through the formal education system. There are policy implications here for the recurrent education and training of young adults (aged 20-25) and older adults as well. The development of the "Open Tech" in the United Kingdom will be of interest in this connection.

In relation to the employment uses of credentials, the issue is not merely one concerning the particular structure of the output of the education/training system in each country, but also the way different credentials are absorbed and recognised by the labour market. In classifying the output of the system in terms of credentials, several dimensions suggest themselves: their educational level, their scope (generality, specificity), their immediate and long-term employment value (unemployment rates, rates of return). Detailed figures would allow one to find out, for example, to what extent there are differences and variations along these dimensions between the various levels of vocational and of general qualifications, as well as among these two types of credentials of similar level. This is an area which calls for further investigation and its implications go well beyond education policy in the strict sense.

However, an accurate picture of the credentials-employment relationship would have to take into account substitutability of educated/trained manpower. Theoretically, with perfect substitution, the structure of output becomes irrelevant, just as with zero substitution it becomes all-important. The reality lies in between, but what is not known is how substitution operates in terms of different types and levels of credential, and whether it is downward substitution (taking a lower-level job than one is trained for), upward substitution (upgrading through learning on-the-job or formal retraining) or lateral substitution (through transfer of learning). The first of these has been observed with graduate over-supply, the second is intimately connected with recurrent education, and the third with the broadening and/or transfer of training or, as a recent report calls it, "learning to take it with you"[15]. All of these forms of substitution have policy implications.

It goes without saying that such phenomena are extraordinarily complex. Not only are the structures of credentials and occupations likely to be related over the longer term[18], but the time elapsed after becoming qualified (immediate, Q + 1 year, Q + 5 years, etc.) is an important variable, as are general and local levels of unemployment, the origin of the credential, and the degree to which it is known by employers. Partial information about some of these relationships exists in some countries. The differences between education systems and employment structures in different Member countries would make cross-national studies extremely difficult; but in the end, if the aim is to relate education to employment in a more systematic way, some at least of these questions will have to be answered.

Finally, it was suggested at the beginning of this chapter that the post-compulsory sector is typified above all by allocation and choice. This suggests that, over and above the specific objectives of any course or institution, there should be a generalised objective related to the nature of this stage of education; namely, *that students should be made as aware as possible of the nature of the choices and pathways confronting them.* Phrases such as "education about work" or "education about education" or "education for self-development" sound abstract and inward-looking; but developments in such directions are worth noting , e.g. *Arbeitslehre* in Germany, preparation for working life, social education, increased emphasis on guidance and counselling, and educational "contracts". If allocation and choice are indeed the unavoidable characteristic features of the post-compulsory stage, the objective aspects of the former (the credential-employment nexus, access to higher education, differentiation of structures and streams) need to be complemented by an awareness of the personal and subjective aspects of the latter. It is only in this way that upper-secondary education can develop a role that goes beyond that of a clearing house.

NOTES AND REFERENCES

1. See, for example, Coleman J.S. and Watson, K. (ed.), *Youth, Education and Employment*, International Perspectives, Croom Helm, London, 1983.
2. Gleeson, D. (ed.), *Youth Training and the Search for Work.*
3. *A Basis for Choice*, Further Education Unit, London, 1981.
4. Magnussen, O., "A Survey of Various Aspects of the Education-Employment Relationship", in *European Journal of Education*, Vol. 14, No.1, 1979, pp.75-80.
5. Ministry of Education, *Educational Policy in Finland.* Background report for the OECD Review on Educational Policy and Planning, OECD Paris, 1981 (document).
6. Department of Education and Youth Affairs: *Youth Policies, Programmes and Issues: An Australian Background Paper*, Australian Government Publishing Service, Canberra, 1983.
7. "Student Flows in Four OECD countries", OECD, Paris (forthcoming document for general distribution).
8. See, for example, Plunkett, D., "The risk group: education and training policies for disadvantaged young people in Sweden and Denmark", in *Comparative Education*, Vol. 18(1), 1982, pp.39-46; and *The Netherlands 16-19 Education* (Comparative Papers in Further Education), F.E. Staff College, Bristol, 1979.
9. Trow, M., *Confronting the Challenge of Under-prepared Students*, Center for Studies in Higher Education, Berkeley, 1982.
10. Gellert, C., "The implications of upper secondary school reform in the Federal Republic of Germany", in *European Journal of Education*, Vol. 16(2) 1981, pp. 175-183.
11. Karstanje, P., "Selection for higher education in the Netherlands", in *European Journal of Education*, Vol. 16(2), 1981, 197-28; and Choppin, B., *The Prediction of Academic Success*, NTER, Slough.
12. Mitter, W., "Problems of the Interrelationship between General and Vocational Education in Europe – a Historical and Conceptual Approach", *Educacion y Futuro*, Conference Report, Madrid, 1982 (mimeo).
13. Pautler, E., "The links between secondary and higher education in France", in *European Journal of Education*, Vol. 16(2), 1981, pp.185-195.
14. For a more detailed discussion see: *Selection and Certification in Education and Employment*, OECD, Paris, 1977.
15. Townsend, C., *Skills Needed for Young People's Jobs*, Institute of Manpower Studies, Brighton, 1982.
16. *Education and New Information Technologies*, Newsletter No.14, European Institute of Education and Social Policy, Paris, October 1983.
17. Reguzzoni, M., "Employment Possibilities and Upper Secondary Schools: the Situation in the Province of Milan", in *Comparative Education*, Vol. 19(2), 1983. pp.219-225.
18. Lutz, B., "Education and Employment: Contrasting Evidence from France and the Federal Republic of Germany", *European Journal of Education*, Vol. 16(1), 1981, 73-86.

Chapter VI

CONCLUSIONS

The Implications of Growth

The point of departure of this report is the rapid expansion over the past two decades of education and training opportunities provided immediately after compulsory schooling, under the combined impact of large cohorts and rising aspirations on the one hand, and high levels of youth unemployment on the other. Studying one or two years beyond basic compulsory schooling or the statutory leaving age is now becoming the norm in a growing number of Western industrialised countries, and is already the established pattern in the United States and Japan. But there has also been an increase in programmes which combine education and training with work experience.

In the majority of Member countries, the growth of formal upper-secondary education and the increase in participation rates of the 16 to 19 year-olds has been slower in recent years than in the early 1970s. Though smaller cohorts will be entering this level by the mid-1980s, the analysis shows that in many countries the potential for further growth remains high, particularly among the 17 to 19 year-olds. The extent to which new groups of young people and adults will choose to enrol in the formal sector will largely depend on the capacity and political will in individual countries to set up new schemes and programmes corresponding to the diversity of needs and interests of a widened clientele and, above all, to the evolution of the employment situation for older teenagers and young adults.

Three implications at least can be drawn from these trends:

a) the upper-secondary or post-compulsory level has now become the main *transition stage* to employment or further training and thus faces many of the same problems which in the past were confronted at the end of basic compulsory schooling;

b) transition to adulthood, once a relatively simple and rapid transfer from school to work for all but the minority who continued on to higher education, is now a lengthy, drawn-out and uncertain process for a far larger proportion of young people;

c) deferred entry into the world of work and lack of large-scale meaningful alternatives for older teenagers have led Member countries to assume greater public responsibility for the whole age group.

While the general trend seems to be that of encouraging the 16 to 18 year-olds to pursue some form of education or training, considered as a more viable and desirable alternative to subsidised employment, temporary work, or unemployment benefits, public responsibility in this area is interpreted in a variety of ways and involves different degrees of government intervention (outlined in Chapter I).

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Main Patterns of Provision

In examining the different ways in which the OECD countries are coping with the expansion and diversification of post-compulsory education and training, the report draws attention to the complexity and diversity of the prevailing arrangements, so much so that it is often difficult to speak of a post-compulsory "system". Courses and schemes are offered in a variety of settings, under different public administrations, and very often with strong involvement of enterprises and the private sector in general. However, three quite clearly distinct policy approaches or models of provision can be identified:

a) the *schooling* model, which aims at integrating most, if not all, forms of provision after compulsory education within the formal system, favouring schooling on a full-time basis for the majority of the age group – as in Japan, the United States, Sweden, Belgium and Finland;

b) the *"dual"* model, prevalent in Austria, Germany and Switzerland, characterised by the presence of a strong and highly-developed apprenticeship sector, organised and administered separately from full-time upper-secondary schools but considered as an integral part of the formal system of initial education and training;

c) the *"mixed"* model, best exemplified by the United Kingdom, whose main feature is the greater importance assigned to training outside the formal education system and outside the scope and control of education authorities.

These models serve to highlight differences in organisational arrangements and must not be seen as ideal entities. In most countries significant features of these three types of organisational settings coexist and recent trends have entailed a further blurring of the boundaries between them. Where the full-time schooling sector dominates, the high priority now being assigned to the development of closer links between education, training and work, the emphasis on alternation between education and work, and on part-time studies, lead to a narrowing of the gap between school programmes and apprenticeship or other less formal types of training. On the other hand, in countries where dual patterns of provision prevail, there has been in recent years greater emphasis on schooling and evidence of increased formalisation of the training provided within enterprises.

It is much more difficult to predict or generalise about the future of *non-formal training schemes*, given their diverse as well as their recent and experimental nature. A key question is whether, as they become more permanent and established, they will be able to maintain their distinctiveness. In the long run, one possibility is that emphasis on a type of training that is broader in nature and leads to recognised qualifications will bring these training programmes closer to the educational establishment, and consequently lead them to adopt many of the features of formal schooling – notwithstanding the possibility that in the process they may bring some changes in schools. Another possibility is that, under strict policy guidelines, they will continue to develop as a parallel or alternative sector, with closer resemblance to the dual approach.

"Those Left Aside"

The report draws attention to the fact that, whatever the prevailing pattern of provision, a major concern in all Member countries is the fate of young people who, in one way or another, are excluded or marginalised from formal education at a relatively early stage. Prolonged education and training for the bulk of the 16 to 19 year group has in fact led to a broader definition of educational disadvantage. While formerly such terms as "early school leavers" or "those left aside" were applied almost exclusively to those who did not complete successfully

or in a normal way their basic schooling, they now include the shrinking but still significant minority who do not continue to any type of education or training beyond the lower secondary level, and increasingly those who leave without obtaining a formal vocational qualification at the upper-secondary or equivalent level. Thus, a sizeable number of young people – primarily among the socially disadvantaged and those with low levels of educational attainment – seek entry into post-compulsory education, not necessarily because they genuinely wish to do so, but for lack of other alternatives or in order to avoid being marginalised or discriminated against in the increasingly competitive job market.

With the exception of Japan, countries with the dual model seem to have the highest proportion of young people leaving initial training with a qualification at the post-compulsory level. This could suggest a certain weakness of the schooling model. Emphasis on integrated upper-secondary schools with a minimum of hierarchical differentiation is perhaps the more effective strategy to achieve greater equity *within* the system, that is, among students who do enrol at this level; however, the greater homogeneity in norms and standards carries with it the risk of excluding *at entry* a relatively high percentage of youngsters more likely to gain qualifications of equivalent value outside the school setting. In these circumstances, the development of all types of non-formal provision and of opportunities for re-entry within the formal sector acquire special significance.

It is highly probable that the need to respond to the interests and requirements of this category of young people, as well as to the vast numbers of adults who have not had any formal education beyond compulsory schooling, will provide the strongest impetus for reforms at this level in the coming years. The development of schemes cutting across the rigid boundaries of the formal and non-formal sectors and those of education and training will no doubt be one type of strategy. But is is clear that a *sine qua non* of any policy aimed at enhancing the career and life-chances of those who have suffered from disadvantage and failure in education at an early stage is the provision and active promotion of lifelong or recurrent education/training opportunities.

The Position of Girls and Young Women

The increase in female participation in secondary and post-secondary studies has been one of the main features of the development of education over the past decades. While there are still marked differences among countries, a rather typical pattern of development can be discerned. At present, overall participation rates of 16 to 19 year-old boys and girls at the upper-secondary level are in general quite evenly balanced, although in some countries girls clearly remain at a disadvantage compared with their male peers, a disadvantage that tends to increase with age. Whereas boys make a far wider use of apprenticeship and non-formal training schemes, girls concentrate heavily in schools. Indeed, the sharpest differences by sex at the post-compulsory level are now in terms of the type of subjects or lines of study pursued. Girls are over-represented in general education, particularly in the humanistic studies, as well as in vocational courses leading to tertiary-sector occupations; they remain significantly under-represented in scientific and technological subjects, as well as in a wide range of traditionally male-dominated vocational courses, particularly when these are offered outside schools.

Although in most countries there is strong concern about the persistence of sex stereotyping in the choice of subjects, the high participation rates of young women in general education carries a number of advantages. In the first place, the standards of general education are often higher than those of many vocational courses. In addition, if it is accepted that girls prefer jobs in the tertiary sector, and that in view of the structural changes foreseen

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in employment, it is this sector that is likely to offer greater job opportunities in the future. It could be argued that a general type of education is likely to provide a more adequate basic preparation for such jobs than many of the more narrowly-oriented courses. Much will depend, of course, on curricular reforms and the extent to which the vicious circle of high female participation and low employment value of programmes can be broken.

It must, however, be underlined that the common pattern among young women to stay on in schools on a full-time basis, and their limited participation in other types of formal education and training leading to a recognised qualification, no doubt reflect their continued disadvantage in society in general, and more particularly in the employment world, which in this respect seems to have advanced at a slower pace than education. In addition to the higher incidence of unemployment among young girls, there is evidence of the greater difficulties they face in finding apprenticeship places or opportunities in employment enabling them through paid leave of absence to enrol in work study schemes or in part-time studies.

Persisting Discontinuities between General, Technical and Vocational Education

Entry into the post-compulsory secondary level usually marks the beginning of formal choices of subjects or of quite sharply delineated lines of study. Whatever the institutional arrangements, most countries establish clear distinctions between a general/academic sector and technical and vocational courses. Large variations in the balance between these major types of study are found among OECD countries. A first group, including most northern continental European countries, enrols between one half and two-thirds of all post-compulsory students in the technical/vocational sector. In a second set of countries, in particular the United States and Japan, the balance between general and technical vocational programmes is the reverse: more than two-thirds of students are in academic/general courses. A number of other countries with relatively low overall levels of post-compulsory participation, and usually with a dominant school sector, have more than half and up to 80 per cent of the students in general education (as in the United Kingdom, Spain, Greece, Portugal). This suggests that, in contrast with the United States and Japan, the future expansion of post-compulsory provision in Europe is largely dependent on the growth of technical/vocational education.

Recent policy in many countries has indeed aimed at increasing the scale of vocational education, both by channelling new groups of students into these branches and by altering the balance between general and technical/vocational studies. Attempts to reduce the share of general education have not, however, been always successful. This is due partly to the difficulty of changing student preferences, particularly in countries where the prestige gap between the two sectors remains high. The fact also remains of a clear mismatch between supply and demand, evidenced by the increased competition for entry into vocational branches and a rising number of rejected candidates in some countries, which is partly due to the high costs involved in setting up vocational programmes and the lack of traineeship places.

The growth and diversity of the student body has led to greater differentiation and sharpened hierarchies within both the general and the vocational branches. Following the well known pattern in the United States, in European countries a growing distinction is emerging within the traditional general branches between academic programmes, geared primarily to entry into higher education, and other general programmes with a more polyvalent orientation. As more young people continue in education and training after the minimum school-leaving age, it is likely that this new type of general studies, with emphasis on preparation for working life, will grow apace – provided that measures are taken to avoid the risk of their being downgraded in the eyes of both students and employers. Much will depend on the capacity and ingenuity of educational policy-makers and practitioners in developing

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new paradigms and operational definitions of general education, better suited to working and societal requirements as well as to the interests and abilities of students who are likely to leave initial education at this stage. In recent years, growing recognition of the need to include subjects related to computer literacy and communication skills have given added impetus to reflection and experimentation in this area.

Sharpened differentiation has also occurred in *vocational education*. A "higher" level can often be distinguished from a "lower" one: the former including well-established programmes demanding strict standards of professional competence and a firm basis of general education, with the lower level preparing for a basic qualification intended to facilitate transition to working life. Whereas in recent years much of the expansion concentrated on the lower levels of vocational training, the pressures of growth and diversification will probably shift some of the emphasis to the more advanced courses, many of which will require greater polyvalence and a stronger scientific and technological basis, often difficult to organise within narrowly-defined vocational training settings.

Bridging the gap between the two sectors of general and vocational education, which are still sharply separated in most countries, remains a difficult problem. In many countries young people are still concentrated in either general or vocational education, and participation rates in long-cycle technical programmes remain relatively low. This lack of middle-ground alternatives is particularly restricting for students with average levels of attainment, or for those who are uncertain or undecided and therefore need alternatives to programmes that either lead directly to higher education or are specifically job relevant. Moreover, this dichotomy becomes increasingly artificial as more training is now being geared towards the preparation for occupations in the service sector, and for middle-level occupations and skills, where distinctions between general and vocational education are far less clear.

The issues raised above place *changes in the curriculum and in the organisation of studies* at the centre of the debate about the future development of post-compulsory programmes designed to improve preparation for work. Three broad approaches can be distinguished in the current debate. A first approach focuses on the *content* of studies, with a strong move in favour of broadening the base of initial training, mainly by grouping occupations in families and by identifying generic skills on the basis of which differentiation can be progressively established. Arguments against this solution are that deferred specialisation forces many youngsters whose minds are already set on a specific subject or occupation to learn much that appears to them as superfluous, and leaves those who do not pursue further specific training with an initial education that is viewed as too general.

A second approach shifts the emphasis from the content to the *process* of training, that is, from *what* is learned to *how* it is learned. It emphasizes that programmes and study schemes do not exist in a vacuum and recognises that exposure to a variety of situations, with different teaching styles, study habits and hidden curriculum can be a crucial element of the education/training experience of young people. The main problem with this approach is that of translating such abstract aims as "transfer of learning", "learning to learn", "problem-solving" into concrete operations. It may also be too demanding on students and teachers who may often prefer to work in more concrete and routine ways. A third approach, essentially an *organisational* one, is to retain the existing specific pattern of initial training but to make wider provision for adults to update their knowledge or to retrain – the idea behind many of the arguments in favour of recurrent education.

Whether the particular type of setting, or combination of settings, in which education takes place (schools or colleges, "dual", non-formal) can succeed in blurring the sharp dichotomies that exist between general and vocational education or between education and training remains to be seen. In one way, dual systems are more promising in this respect

because of their broad coverage and greater openness to less advantaged groups. At the same time, however, their main underlying principle is precisely the maintenance of two clearly separate sectors with contrasting values: one dominated by the academic ethos, and the other by that of the workplace. Even greater difficulties of bridging the gap between education and training may be faced in countries where schooling is associated almost exclusively with general education, whether these countries follow a "schooling" or a "mixed" pattern of provision. It is also important to realise that in countries where the economic and social standing of technical and productive work is relatively high and where vocational education carries less of an educational and social stigma, these dichotomies have less serious social connotations.

The Central Role of Upper-secondary Schools and Colleges

As the report makes abundantly clear, upper-secondary schools and colleges cater for the majority of the age group in most Member countries and the quasi-totality in quite a few of them. The present organisation of upper-secondary schools appears to be more the result of marginal adjustments brought about by the need to expand provision than of clearly thought out initiatives and active policies which take account of the changing composition of the student body. It also results from the direction of educational reforms over the past decades which focused primarily on the lower-secondary level – following the extension of compulsory schooling – and on systems of higher education. Sandwiched between these two sectors, with quite different but strong power bases, formal upper-secondary institutions very often developed in response to pressures from the lower and higher layers of the education system, without sufficient consideration being given to goals and objectives germane to this level of schooling *per se*.

There are important differences among OECD countries. In the United States and Japan, where upper-secondary education developed as a direct extension of basic schooling, it has kept many of the features of "schools for children" in terms of similar teaching styles and classroom setting, and the endowment of a relatively uniform educational and social experience. Having achieved quasi-universal attendance, basic schooling in these countries is now associated with full secondary education, so that the last years of secondary education represent the final stage of a continuum rather than a two-tier system with sharp breaking points.

In most European countries where, historically, the dominant function of secondary education has been the selection and preparation of a social and intellectual minority for university studies, systems followed a different pattern of development. The trend was to introduce a sharp break between compulsory lower-secondary and post-compulsory upper-secondary education and to expand traditional secondary programmes, with a strong emphasis on academic styles and values. It is only more recently that the growth and diversity of upper-secondary students has forced consideration of more far-reaching organisational and internal reforms.

One dominant organisational question concerns the appropriate types of institution to be developed at this level. A fairly common pattern in OECD countries is the coexistence of full general secondary schools, covering a wide age range (11/12 to 18/19) with post-16 vocational schools. In a number of countries with mass upper-secondary school attendance (Japan, Sweden, Norway, France, Italy) separate post-16 provision is the predominant mode. Post-16 colleges seem to offer a more favourable setting for older adolescents but the social and psychological effects of isolating a narrowly-defined age group have also to be considered. Some of these could be avoided if post-16 colleges could be widened to cater for older students.

Much depends on the rigidity of the boundaries between secondary and higher education, which currently seem to be far stronger in European countries than in the United States. Indeed, it could be argued that in the coming years many European countries will be under strong pressure to develop post-compulsory "tertiary", "further education", or community-type colleges that straddle both levels of education, provide for greater flexibility and have a stronger "consumer" orientation.

A second major organisational question is the degree to which upper-secondary institutions should be specialised or whether the different lines of study or branches should be more closely integrated. Until fairly recently one of the guiding principles for the expansion of upper-secondary institutions in the majority of Member countries, deriving from equity considerations, was the closer integration of options and programmes within larger, more comprehensive institutions. However, the changing socio-economic climate, and the strains created by the wide range of students' abilities and interests, have recently shifted support in favour of more specialised settings with clearly distinct orientations. Not surprisingly, it is in the United States, with very high participation rates and the most advanced forms of integration, where certain features of the comprehensive model have recently come under strong criticism.

In contrast with the United States and Japan, European countries with an active policy of closer integration of general, technical and vocational education do not interpret this as the introduction of a common core curriculum or of a single secondary school qualification. Integration is primarily understood as the coexistence within the same institution, or within a small number of different institutions, of clearly-defined and structured lines of study, each one leading to a corresponding qualification. Thus, integrated upper-secondary schools serving all young people within a given catchment area are not viewed as incompatible with curriculum differentiation and specialisation. Closer integration is, on the contrary, seen as a strategy to give full upper-secondary status to all options, in particular those of the vocational sector.

Scepticism vis-à-vis polyvalent upper-secondary institutions also derives from concerns over the quality and the employment value of programmes. The traditionally strong opposition from academic quarters is shared by many representatives of the vocational training and employment sectors, the former fearing the effects of integration on the standards and prestige of academic programmes, the latter expressing serious misgivings about the fate of vocational programmes offered within environments dominated by traditional educational norms.

No one seriously questions the need for major reforms in upper-secondary education in response to the changing demands of the surrounding communities. But there is by no means an external consensus as to the direction which this change should take. Moreover, schools and colleges are now part of a colossal educational enterprise, with heavy bureaucratic machinery and complex structures of administration and control, involving formal systems of authority and less formal, but strongly influential, interest groups. Their increased administrative load resulting from the need to comply with a flood of laws, rules and regulations, and to account for such compliance, has inevitably led to an even stronger formalisation of education within the formal system and has added to the difficulties of initiating and implementing reforms. To this must be added the difficulties that arise from the trend in many countries to develop secondary schools of enormous size, with all that this implies for management and feelings of anonymity and alienation among disparate age groups, lacking a sense of community and common socialisation. Concern to reduce these rigidities has given impetus to policies in favour of decentralisation and greater institutional autonomy. It is, however, not evident that locally controlled schools are better protected from the burdens of bureaucracy. Moreover,

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institutional autonomy has become a very sensitive issue, as many of its advocates see it now primarily as a means of promoting competition among schools and of enabling market forces to play a greater role in educational provision. Increasingly, it is also seen as a strategy for developing or strengthening private education. This, in turn, has led to a more cautious attitude among those who support a relatively high measure of autonomy but who fear the negative social consequences of growing disparities and widening quality differences among schools.

Finally, it must be recalled that upper-secondary schools, with their long tradition of focusing on preparing young people for further studies rather than for direct entry into the world of work, will find it extremely difficult to undertake, over a short period, the radical changes needed adequately to fulfill their transition function vis-a-vis a far greater number of young people. Moreover, schools cannot be expected to do this job alone, especially with a teaching force which has had scarce experience outside education. It seems an incongruous and self-defeating enterprise to require schools to substitute for the family, the community or the workplace in preparing for adult life, tasks for which they are inadequately equipped, particularly as one of their main recognised missions is precisely to teach what other institutions or life experiences cannot or do not usually provide.

Underlying the search for greater openness and responsiveness to pressing societal requirements, there is a shared public concern that new measures in favour of alternation, such as combined work study schemes or youth service, should not detract schools from fulfilling their essential task of instructing in the basic disciplines and communication skills. This is all the more important, since it is primarily in this field that schools can potentially make their most valuable contribution, both to young people themselves, and to society in general.

All these considerations have major implications for the role of upper-secondary education and training in the orientation, allocation and selection of students. While allocation and choice are indeed the unavoidable features of the post-compulsory stage, the report argues that, over and above the specific objectives of any course or institution, a general objective of this stage should be to at least ensure that students are made as aware as possible of the nature of the choices and allocations confronting them.

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